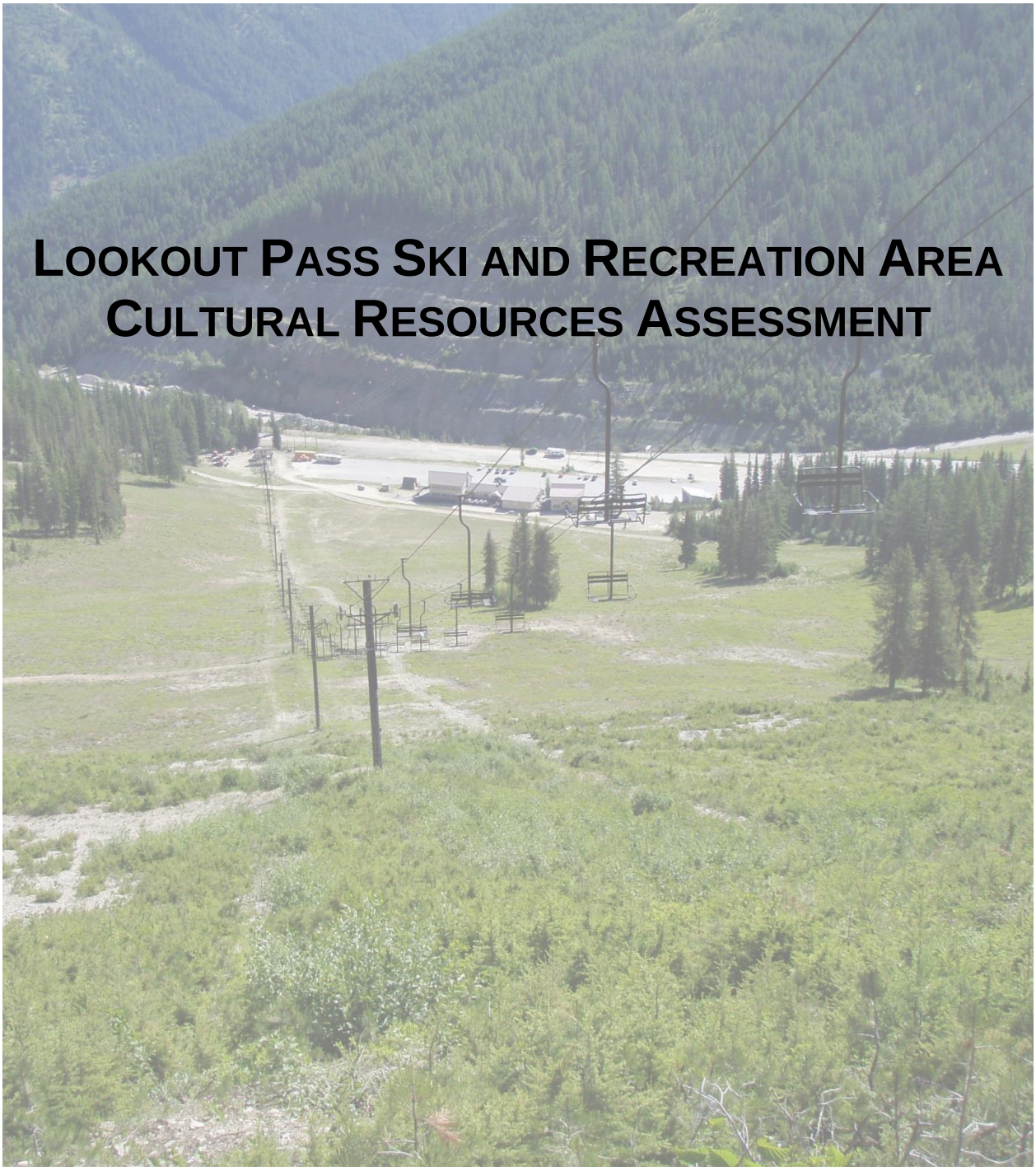
APPENDIX F

Cultural Resources Assessment

LOOKOUT PASS SKI AND RECREATION AREA CULTURAL RESOURCES ASSESSMENT



Prepared for

Idaho Panhandle National Forests
3815 Scribner Way
Coeur d'Alene, Idaho 83815

Prepared by

SWCA®
ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.®

January 2016

LOOKOUT PASS SKI AND RECREATION AREA CULTURAL RESOURCES ASSESSMENT

Prepared for and submitted to

Idaho Panhandle National Forests
3815 Scribner Way
Coeur d'Alene, Idaho 83815

Prepared by

Ross Smith, Brandy Rinck, and Lorelea Hudson

Project Manager: Sue Wilmot

SWCA Environmental Consultants
221 First Avenue West, Suite 205
Seattle, Washington 98119
(206) 781-1909
www.swca.com

January 27, 2016

CONTENTS

Introduction **1**
Location 1
Area of Potential Effects 1
Project Description 1
Proposed Action (Alternative 2) 1
Ski Trails and Terrain 4
Lifts 6
Power Line 7
Parking 8
Maintenance Facilities 8
Guest Service Facilities (ski patrol service building and restroom) 8
Roads and Access 8
Alternative 3 9
Setting **10**
Natural Setting 10
Geology and Soils 10
Climate, Vegetation, and Wildlife 11
Cultural Setting 11
Pre-Contact Period 11
Ethnohistory 13
Historic Period 14
Exploration and Development of the Mullan Road 14
Mining 15
Transportation 15
Recreation (Ski Area Development) 17
Previous Cultural Resources Investigations 17
Idaho 17
Montana 19
Summary 20
Methods **21**
Idaho (Idaho Panhandle National Forests) 21
Montana (Lolo National Forest) 24
Common Field Survey Methods 24
Site Evaluation 25
Assessment of Effects 25
Results **26**
Idaho 26
LP-01/24MN372 (St. Regis Pass Historic Debris Scatter) 26
Current Investigations 26
Site Description 33
Evaluation of Significance 35
Potential Effects 35
10SE888 (Northern Pacific Railroad Bed) 35

Current Investigations 35
Site Description 37
Evaluation of Significance 37
Potential Effects 37
10SE1189 (the Mullan Road) 37
Current Investigations 37
Site Description 42
Evaluation of Significance 42
Potential Effects 43
Montana 43
LP-01/24MN372 (St. Regis Pass Historic Debris Scatter) 43
Current Investigations 43
Site Description 43
Evaluation of Significance 45
Potential Effects 47
24MN120 (Northern Pacific Railroad Segment) 48
Current Investigations 48
Site Description 48
Evaluation of Significance 48
Potential Effects 48
24MN133-G (the Mullan Road, St. Regis [Sohon] Pass to St. Regis River segment) 50
Current Investigations 50
Site Description 50
Evaluation of Significance 50
Isolated Artifacts 52
IO-01 (Lithic Debitage) 52
Resources Noted but Not Recorded 52
State Line Survey Boundary Markers 52
Mining Prospect Pits and Claim Markers 52
Assessment of Effects 54
Idaho 54
Montana 54
Mitigation 55
References Cited 56

ATTACHMENTS

Some attachments redacted from public version.

Attachment A. Archaeological Resources Protection Act Permit
Attachment B. Shovel Probe Summary
Attachment C. Idaho Archaeological Site Forms
Attachment D. Montana Archaeological Site and Isolate Forms
Attachment E. Noted but Not Recorded Mining features

FIGURES

Some figures redacted from public version.

Figure 1. Project location map. 2
Figure 2. The Lookout Pass Ski and Recreation Area APE. 3
Figure 3. Major components of the Lookout Pass Ski and Recreation Area project. 5
Figure 4. Map illustrating the route of the Mullan Road over St. Regis (Sohon) Pass, 1904. 16
Figure 5. High, medium/moderate, and low site probability identified areas in the proposed disturbance areas in the APE. 23
Figure 6. Archaeological survey and shovel testing areas in the APE 27
Figure 7. Shovel Probe Area 1 (see Figure 6). 28
Figure 8. Shovel Probe Area 2 (see Figure 6). 29
Figure 9. Shovel Probe Area 3 (see Figure 6). 30
Figure 10. Archaeological and historical resources identified within the APE 31
Figure 11. LP-01/24MN372 site map. 32
Figure 12. Maker's marks identified on bottle bases recorded in LP-01/24MN372. 34
Figure 13. Site map for 10SE888. 36
Figure 14. The Mullan Road (10SE1189) site area overview. 38
Figure 15. The Mullan Road (10SE1189) site area (map 1 of 3). 39
Figure 16. The Mullan Road (24MN133) site area (map 2 of 3). 40
Figure 17. The Mullan Road in Montana (24MN133) site area (map 3 of 3). 41
Figure 18. Overview of the Mullan Road tread at Cross Section 1, view to the northwest. 42
Figure 19. LP-01/24MN372 site map. 44
Figure 20. Maker's marks identified on bottle bases recorded in LP-01/24MN372. 46
Figure 21. Open hole left by the excavation and removal of a sapling root mass, view to north. 47
Figure 22. Northern Pacific Railroad Segment (24MN120) site map. 49
Figure 23. The Mullan Road (24MN133-G) site area overview. 51
Figure 24. Location of IO-01 and adjacent shovel test probes. 53

TABLES

Table 1. Proposed Road Actions for the Lookout Pass Ski Area Expansion Draft Environmental Impact Statement 9
Table 2. Previous Cultural Resources Investigations Completed in Idaho within 1 Mile of the Area of Potential Effects 17
Table 3. Cultural Resources Recorded in Idaho within 1 Mile of the Area of Potential Effects 18
Table 4. Previous Cultural Resources Investigations Completed in Montana within 1 Mile of the Area of Potential Effects 19
Table 5. Cultural Resources Recorded in Montana within 1 Mile of the Area of Potential Effects 19
Table 6. Summary of Previously Identified Resources in the Area of Potential Effects 20
Table 7. Survey Coverage by Probability Ranking 26
Table 8. Bottle Maker's Marks and Associated Production Dates from LP-01/24MN372 33
Table 9. Bottle Maker's Marks and Associated Production Dates from LP-01/24MN372 45
Table 10. Idaho NRHP Eligibility Summary 54
Table 11. Montana NRHP Eligibility Summary 54

This page intentionally blank

INTRODUCTION

Lookout Pass Ski and Recreation Area proposes to expand its ski area south and west of the current special-use permit boundary onto additional National Forest System (NFS) lands in the Idaho Panhandle National Forests (IPNFs) and Lolo National Forest (LNF). This expanded boundary would encompass an additional 654 acres of NFS lands and permit development of additional ski lifts, traditional terrain and gladed terrain ski trails, expanded parking, access roads, and other facilities.

The proposed project requires a special-use permit from the IPNFs and is therefore subject to the National Historic Preservation Act of 1966, as amended. Section 106 of the act requires agencies to take into consideration the effects such undertakings may have on historic properties. As part of the environmental impact statement (EIS) process, SWCA Environmental Consultants was retained by the IPNFs to conduct a cultural resources assessment in compliance with Section 106.

Location

Lookout Pass Ski and Recreation Area is approximately 12 miles east of Wallace, Idaho, south of Interstate 90 (I-90) on the Idaho-Montana border (Figure 1). Administration of the ski area is split between the IPNFs in Shoshone County, Idaho, and LNF in Mineral County, Montana. Approximately 55 percent (359 acres) of the 654 additional acres of NFS lands are in the IPNFs and 45 percent (295 acres) are in the LNF. The legal locations of Lookout Pass Ski and Recreation Area, per state, are as follows:

- Idaho: Sections 4, 5, 6, and 7, Township 47 North, Range 6 East and Sections 32 and 33, Township 48 North, Range 6 East, Boise Meridian.
- Montana: Section 6, Township 19 North, Range 32 West, Section 1, Township 19 North, Range 33 West, Section 31, Township 20 North, Range 32 West, and Section 36, Township 20 North, Range 33 West, Principal Meridian.

Area of Potential Effects

An area of potential effects (APE) for a project is identified based on the geographical extent of a project and on the activities that may affect cultural, historic, or archaeological resources. The APE for this project comprises the existing 538-acre Lookout Pass Ski and Recreation Area and the 655-acre proposed expansion area (Figure 2). Of these, 606 acres are in the IPNFs and 587 are in the LNF.

Project Description

Proposed Action (Alternative 2)

The Proposed Action would consist of the following major project components:

- Fifteen new ski trails, totaling approximately 91 acres of new terrain for traditional downhill skiing. Trees would be removed within the ski trail corridor.
- Nine acres of gladed terrain where individual beetle-infested trees would be removed.
- Two new fixed-grip lifts (for two to four passengers per chair on Lift 5 and two passengers per chair on Lift 6) to provide access to the new ski trails.

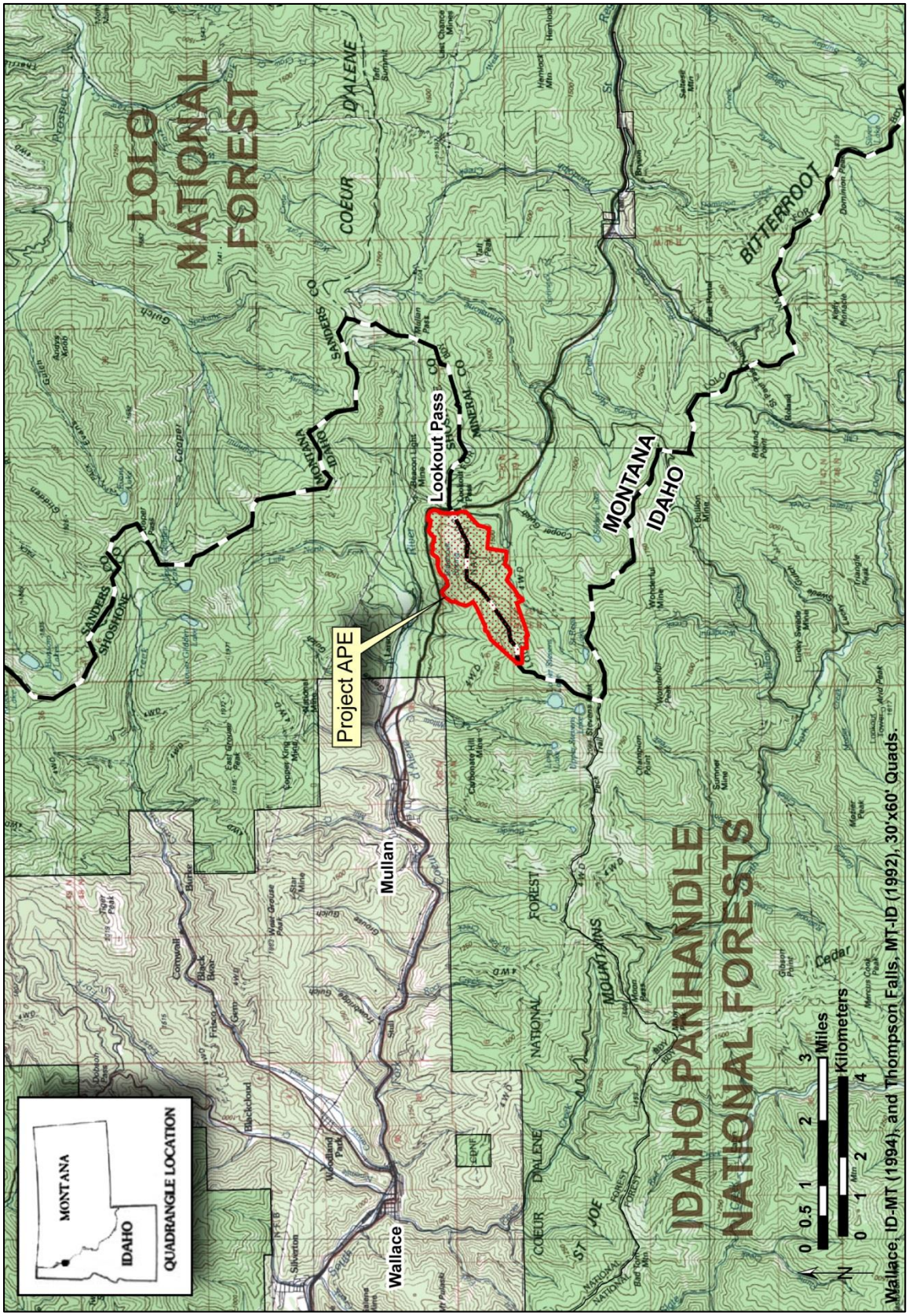


Figure 1. Project location map.

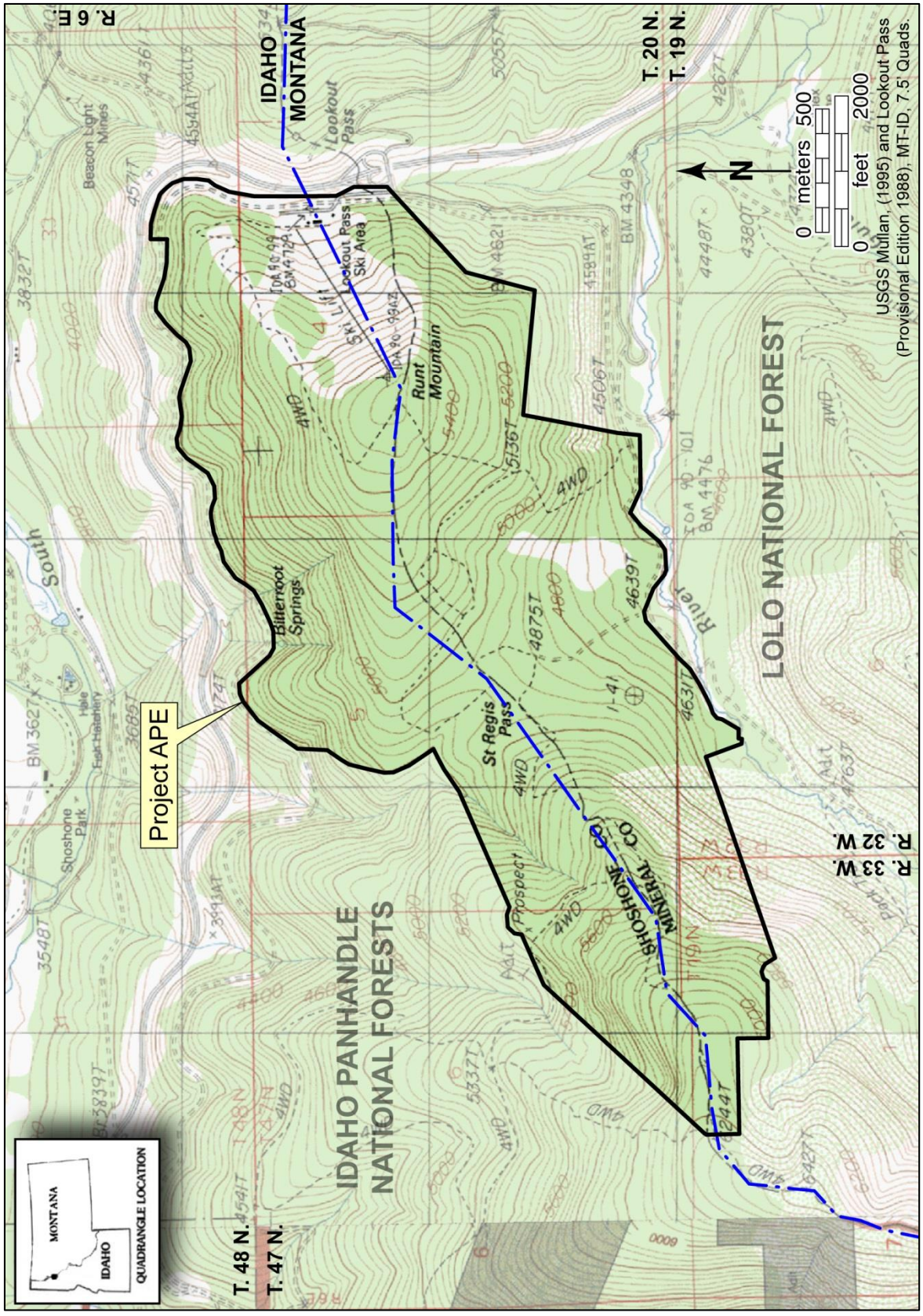


Figure 2. The Lookout Pass Ski and Recreation Area APE.

- An upgrade of existing Lift 1 from a two-passenger lift to a fixed-grip or detachable four-passenger lift.
- A buried power line from the bottom of existing Lift 1 to the bottom drive terminals of proposed Lifts 5 and 6 (approximately 12,000 feet of cable).
- Approximately 130 new parking spaces (7 acres) in two locations: near the main lodge and along Lookout Pass Ski and Recreation Area's access road.
- A 7,000-square-foot (120 × 60–foot) maintenance shop and adjacent 864-square-foot (36 × 24–foot) concrete pad with fuel storage tanks near the main lodge. A new, permanent 0.01-mile road would provide access to these facilities.
- A 24 × 20–foot ski patrol service building located at the top of proposed Lifts 5 and 6.
- A 13 × 10–foot restroom structure near the proposed Lift 5 bottom terminal.
- 1.4 miles of temporary roads for timber harvest and lift construction.
- 2.8 miles of new or reconstructed permanent roads for timber harvest, lift construction, and long-term operation and maintenance.
- 2.3 miles of road decommissioning (NFS Undetermined Roads 37315 and 37315-1).

These components are described in detail below are shown on Figure 3.

SKI TRAILS AND TERRAIN

Fourteen of the 15 new ski trails would measure 120 feet wide, and one would measure 150 feet wide. All would be located below tree line and provide a total of 91 new acres of traditional terrain.1 Of this total, approximately 23 acres would be new novice to low intermediate terrain through the creation of the Windsong ski trail and three new connector ski trails: Tamarack, Dizzy Lizzy, and R2C2. Tamarack ski trail (off the existing Rainbow Ridge ski trail) would provide skier and snowboarder access to the bottom of proposed Lift 5. The two other new connector ski trails would allow skiers and snowboarders to proceed from the bottom of proposed Lift 5 to the bottom of existing Lift 2 for access back to existing ski terrain. The remaining acreage (68 acres) would provide new intermediate to advanced intermediate terrain.

Construction of traditional terrain ski trails would require the removal of all trees within the ski trail corridor. Timber harvest during ski trail construction would be conducted via ground-based yarding using wheeled and tracked equipment (including forwarders). Trees would be cut at ground level, and stumps and roots would be left intact unless they present safety issues that necessitate removal by harvest equipment. Slash, including limbs and large woody debris, would be either removed or burned. Shrubs on ski trails would be trimmed periodically during summer operations to ensure safe downhill skiing conditions in winter. Ski trail edges and leave islands would also be treated (such as through selective "feathering" or thinning), as necessary, to maintain edge integrity while minimizing the potential for wind damage and the spread of disease or insects.

[1] Cleared terrain associated with the middle segment of the Lift 5 corridor is not considered a planned run and is therefore not included in this calculation, although skiers would be permitted to ski down the corridor as desired.

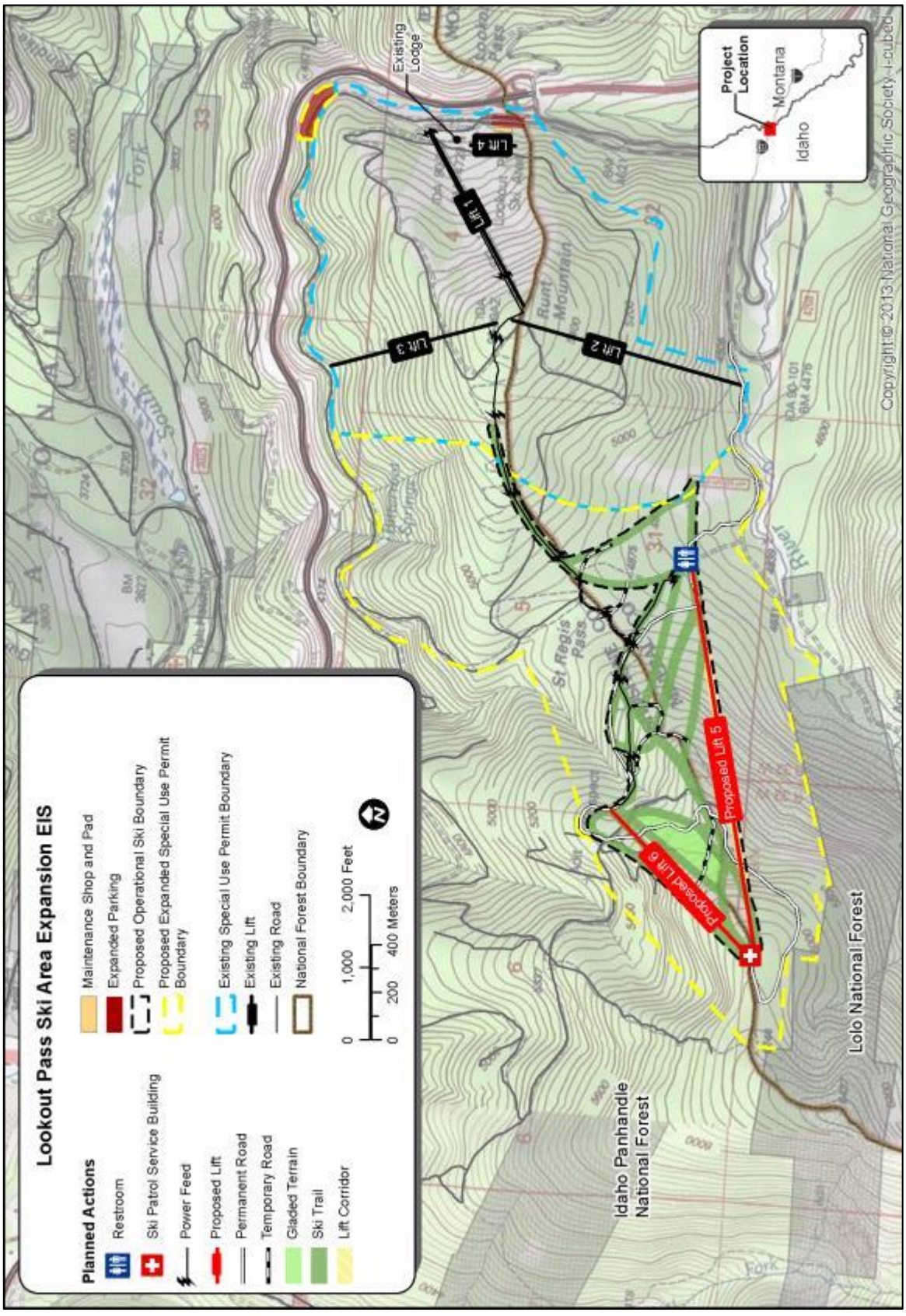


Figure 3. Major components of the Lookout Pass Ski and Recreation Area project.

Up to 11 acres of the new ski trails would be graded to minimize side slopes and provide easier skier transitions across proposed and existing permanent road edges. Grading would consist of removing all vegetation, stockpiling topsoil and incorporated plant materials, adjusting topography to meet site-specific needs, re-spreading topsoil, and revegetating with native and desirable non-native plants.

Low-impact yarding methods would be used for tree removal in wetlands or other sensitive areas. Trees would be directionally felled away from sensitive areas to minimize impact. Trees would also be felled towards designated temporary roads to minimize the ground-based yarding distance. Low–pressure, rubber-tired skidders, or tracked mechanized yarding equipment, would be used for yarding to minimize rutting or other soil disturbance, and the leading end of logs would be suspended during yarding with either a grapple or bull-line and arch. Winching of logs from the stump to the skidder with a bull-line would be minimized. When possible, a debris mat formed from logging slash would be used in sensitive terrain to minimize soil impact.

Proposed Lifts 5 and 6 would also provide visitors with access to 9 acres of new gladed terrain. Trees with beetle infestation damage within this area would be removed, and wood waste would be chipped and used for erosion control, cut for firewood, or piled and burned according to Forest Service standards and air quality controls.

Two permanent culverts would be placed in a perennial stream approximately 400 feet east of the base of Lift 6. The stream crossing is located on mild terrain (25% or less slopes) upslope of a wetland and a few hundred feet above a steeply incised stream channel. The crossing would consist of a main channel and a secondary fork that experiences flows during larger storm events. Culverts would be placed in both channels to facilitate natural hydraulic conditions of the downstream wetland. Fill height at the crossing would be kept to the minimum possible. All culverts would be designed to meet the 100-year flow. The specific design would be determined before construction. However, upon further assessment, the crossing would meet the intent of the water quality standards of the State of Montana and the IPNFs and LNF Forest Plans.

Lookout Pass Ski and Recreation Area would establish an operational downhill skiing boundary along the outermost ski trails. This boundary establishes the legal limits where skiers are allowed to ski and would be clearly marked by signs posted on trees to alert skiers when they approach out-of-bounds ski areas; no ground disturbance would occur during sign installation.

LIFTS

Lift 1 would be upgraded from a two-passenger lift to a four-passenger lift to increase the number of skiers the lift can accommodate. A new drive terminal, a return terminal, and 14 line towers would be installed to support this upgrade. Existing terminals would be removed, line towers would be cut at ground level, and tower footings would be left in place. Less than 0.1 acre of terrain disturbance would occur during installation of the new top and bottom terminals and line towers. New line tower footings paralleling the existing route, each measuring approximately 4 × 4 feet and placed at a depth of 8 feet, would support the upgraded lift. Terminal specifications would depend on the manufacturer's design. However, for the purposes of analysis, an average drive terminal size of 18 × 12 feet and an average return terminal size of 8 × 4 feet are assumed. Existing access roads would be used for construction and maintenance of upgraded Lift 1; no new road construction would be required.

Two new lifts—Lifts 5 and 6—would be constructed in the proposed special-use permit expansion area to provide skier access to new traditional and gladed terrain. Lift construction would occur within tree-cleared corridors measuring 100–120 feet wide. Lift 5 would be approximately 5,200 feet long with a vertical rise of approximately 1,300 feet. It would serve six trails and provide access to the Lift 6 ski trails. Lift 5 would be installed as a fixed-grip lift for two, three, or four passengers. Depending on final

engineering design for the lift, approximately 24 towers would be needed. Approximately 0.1 acre of ground disturbance would occur during installation of the top and bottom terminals and line towers. The disturbance acreage does not include proposed temporary and permanent road construction, which is addressed in the Roads and Access section.

Lift 6 would serve six trails and would provide access back to the Lift 5 trails. The lift would be approximately 2,800 feet long with a vertical rise of approximately 800 feet, and would be installed as a fixed-grip, two-passenger lift. As with Lift 5, approximately 0.1 acre of ground disturbance would occur during installation of the top and bottom terminals and an estimated 12 towers (depending on final design).

Lift terminal locations were determined based on the site's ability to provide access to proposed ski trails and to ensure adequate space for lift lines, unloading areas, and general congregation areas.

Lifts 5 and 6 would be constructed as bottom drive lifts. Power to the lifts would be supplied through a new underground power line, as well as via backup diesel or gasoline generators. The new lifts would incorporate components recycled from the Lift 1 upgrade as well as used components purchased from other ski areas to promote resource conservation and to reduce costs. Lift terminals and towers would be transported to each site using logging equipment (forwarders, tractors, or skidders). Some tower foundations would be poured using concrete pump trucks while others could require concrete buckets flown by helicopter.

POWER LINE

Proposed Lifts 5 and 6 would be powered via an underground power cable installed by Avista Power Company. Per Avista Power Company (Edholm 2013e), there is sufficient capacity (13,000 volts) to serve the new loads that would be needed for the proposed project on a single three-phase circuit within an existing transformer located at the base of existing Lift 1. One additional power pole would be installed near the base of Lift 1 to provide a power source. Depending on the route, Avista Power Company could also need to install a buried line from the top of Lifts 5 and 6 to the bottom of Lift 2 for an emergency loop feed (Avista Power Company 2014). For the purposes of analysis, construction of the emergency loop feed is assumed to occur within existing and proposed lift corridors, roads, or ski trails; no additional ground disturbance would be required.

From the bottom of existing Lift 1, the underground power cable would be routed to the bottom drive terminals of proposed Lifts 5 and 6 within a 75-foot construction easement. The approximately 12,000 feet of buried cable would be installed up the Montana Face trail and then down the Rainbow Ridge trail to one of the new connector trails. From there, the cable would be routed along proposed temporary roads and ski trails to the bottom terminals of Lifts 5 and 6. Avista Power Company would construct a 20 × 20–foot transformer at the power line terminus.

The power line would cross one unnamed spring-fed creek near the base of Lift 6. The cable would be either directionally drilled under the creek or installed using an open-cut method. The creek would be restored to pre-construction or better condition, and erosion and sediment control measures would be installed to reduce streambank and upland erosion and sediment transport into the waterbody.

This power line corridor would also serve as an escape ski trail for skiers to reach existing Lift 2 and proposed Lift 5 if proposed Lift 6 should become inoperable. Lift maintenance and operations staff would also be able to use this corridor to access proposed Lift 6. A 10-foot permanent power line easement would be maintained by Avista Power Company for maintenance purposes.

PARKING

The Proposed Action would add 6.6 acres of parking in two areas to accommodate an additional 130 vehicles and buses, based on a 90-degree parking angle and 19 × 10–foot spaces.

Parking would be extended to the north of the overflow parking lot to permit parking on both sides of the railroad grade while maintaining a 20-foot-wide roadbed for ingress and egress for other users such as snowmobilers accessing the Northern Pacific Railroad Trail. Approximately 5.2 acres are available in this area for parking; however, because of the steepness of the surrounding terrain, parking would not be possible in some locations. Lookout Pass Ski and Recreation Area estimates that the area would support 50 parking spaces, as well as provide room for a turn-around to handle vehicles with trailers and recreational vehicles.

South of the existing paved parking area, 400 feet of new parking would be added on the west side of the access road and on the west side of the existing railroad grade, which, due to less-steep topography, would provide an additional 80 parking spaces within 1.4 acres. The area along the railroad bed would be used for employee parking and would have at least 20 feet for ingress and egress for other users.

Parking areas would be graded to near level and covered with gravel or crushed rock to minimize erosion. Drainage from the parking areas would be routed to upland vegetated areas. Parking lot snow removal and storage would be planned to provide for vehicle and snowmobile ingress and egress. No snowmobile off-loading or trailer parking would be designated or permitted within the special-use permit area boundary. Traffic signs would be posted in parking areas to control vehicle speed.

MAINTENANCE FACILITIES

A new 7,000-square-foot (120 × 60–foot) maintenance shop and adjacent 864-square-foot (36 × 24–foot) concrete fuel tank pad would be constructed just south of the existing fueling pad station to support ski operations. A 0.01-mile new permanent gravel road would be constructed to provide access between the maintenance facilities and the lodge.

GUEST SERVICE FACILITIES (SKI PATROL SERVICE BUILDING AND RESTROOM)

A 480-square-foot ski patrol service building and warming hut would be constructed at the top of proposed Lifts 5 and 6. The log structure would be similar to the existing ski patrol service building and would be powered by propane or fuel cell technology to provide heat and light.

The Proposed Action would also include construction of an approximately 160-square-foot, two-stall Romtec restroom structure near the proposed Lift 5 bottom terminal, just off existing NFS Road 18591 along a proposed new permanent road. These roads would be constructed or reconstructed to permit pump truck access for vault pumping during summer months. For winter pumping, Lookout Pass Ski and Recreation Area would equip a snowcat with a tank and pump to access the vaults.

Guest service facility upgrades would not require a change to Lookout Pass Ski and Recreation Area's existing water system. No snowmaking would occur under the Proposed Action.

ROADS AND ACCESS

Approximately 4.2 miles of permanent and temporary roads would be constructed or reconstructed to Forest Service standards by Lookout Pass Ski and Recreation Area to facilitate timber harvest and ski area maintenance and operations, as summarized in Table 1. Temporary logging roads and Lookout Pass Ski

and Recreation Area's permanent access road would be closed to public travel; all motorized use within the special-use permit boundary would be prohibited upon completion of expansion activities, except as authorized in the permit. However, all existing surrounding Forest Service roads and trails currently open to motorized or non-motorized public use would remain open under all alternatives.

Entry to the project area during the timber harvest and construction phases would occur via existing NFS Roads 9132, 4208, 18591, and 3026A. Based on current road planning, approximately 0.5 mile of NFS Road 18591 would require grading and reconstruction to accommodate logging trucks and construction vehicles and to facilitate tree removal and transport from adjacent ski trails. Grading would begin approximately 800 feet from the junction of NFS 4208 and would involve reshaping the subgrade by excavating material on the outer, or downslope, portion of the road prism and placing it along the inner, or upslope, portion of the road prism to provide an out-sloped road. Clearing 10–15 feet on both sides of the existing road prism would be necessary along most of the road segment to accommodate road re-grading activities and to meet Forest Service construction standards. At one low-water stream crossing, roughly 1,700 feet from the junction with NFS 4208, clearing of vegetation on the downstream side would be confined to the grading limits of the new drainage structure and any trees deemed *hazard trees* per the Occupational Safety and Health Administration (OSHA). Additionally, one pipe arch (squash pipe) would be installed at the low-water crossing. As previously noted, this culvert would be designed to meet the 100-year flow. The specific design would be determined before construction. However, upon further assessment, the crossing would meet the intent of the water quality standards of the State of Montana and the IPNFs and LNF Forest Plans. With the exception of potential, temporary road closures during reconstruction, NFS Road 18591 would remain open to all motorized and non-motorized use as permitted by Forest Service travel management plans.

Table 1. Proposed Road Actions for the Lookout Pass Ski Area Expansion Draft Environmental Impact Statement

Road Action	Operational Maintenance Level	Miles
Existing permanent road reconstruction		
NFS Road 18591	2	0.5
New road construction		
Temporary logging routes	Not applicable	1.4
Permanent roads	2	2.3
Total road construction and reconstruction		**4.2**

Alternative 3

Alternative 3 was developed in response to comments received during public scoping. Some commenters expressed concern the Proposed Action would lead to unacceptable impacts on water quality, wildlife species and habitat, and forest vegetation. To respond to these concerns, the Forest Service developed a new action alternative, Alternative 3, which sought to avoid or reduce potential environmental impacts by

- eliminating all temporary road construction by using skid trails;
- eliminating three ski trails to expand the size of some inter-trail leave islands; and
- increasing the size of the gladed area to remove more insect-damaged trees.

For the purposes of this cultural resources report, all project-related potential effects to cultural resources for Alternative 3 would be captured by the Proposed Action (Alternative 2). Therefore, this alternative is not further discussed.

SETTING

Natural Setting

The APE is located in the Bitterroot Mountains at St. Regis Pass (originally known as Sohon Pass) in the Coeur d'Alene Mountains of the Bitterroot Range of the Rocky Mountains, along the ridge separating the St. Regis River drainage from the South Fork Coeur d'Alene River (Alt and Hyndman 1989). The APE covers the east and south flanks of Runt Mountain to the east and the east side of an unnamed peak to the west of St. Regis Pass at elevations between approximately 4,200 and 6,160 feet.

Geology and Soils

Lookout Pass is at a 4,710-foot elevation pass at the east edge of the Silver Valley on the border between Shoshone County, Idaho, and Mineral County, Montana. I-90, on the north and east sides of the APE, follows the South Fork of the Coeur d'Alene River along the Osborn Fault, then crosses the Coeur d'Alene Mountains over Lookout Pass to the east of St. Regis Pass. To the east of Lookout Pass, the St. Regis River follows the same fault lineament (Wallace and Hosterman 1956). The area west of the pass is generally well known as part of the Coeur d'Alene mining district, and one of the deepest mines in the world is 5 miles west of Lookout Pass in Mullan, Idaho.

The Idaho panhandle is primarily composed of Precambrian sedimentary rocks, such as those of the Belt Formation. Belt Formation rocks can be more than a billion years old and are divided into six formations (Alt and Hyndman 1989). From oldest to youngest they are the Prichard, Burke, Revett, St. Regis, Wallace, and Striped Peak Formations. All but the youngest Striped Peak Formation contain ore veins due to their position in the Lewis and Clark Fault Zone (LCFZ).

The LCFZ formed between 70 and 90 million years ago as a result of complex folding and faulting of Belt Formation bedrock during the uplift of the Rocky Mountains (Chamberlain et al. 1989; Lonn and McFaddan 1999). Uplift on the LCFZ slowed down 25 million years ago, leaving behind large faults, such as the Placer Creek and Osburn Faults, and the Camel's Hump Structure (Harrison et al. 1974; Sears 1983; White 1993; Winston 1986). Volcanic material from the Earth's mantle intruded into the metasedimentary bedrock during folding and faulting to form dikes and seams. All of the heat and pressure caused by the tectonic activity allowed for hydrothermal alteration and mineralization to occur in and around the intrusions, creating gold (as a placer within quartz), silver (tetrahedrite), lead (galena), copper (chalcopyrite), zinc (sphalerite), and various iron mineral veins (Bennet et al. 1989).

This hydrothermal alteration, known to miners as "bleaching," was historically used in the Coeur d'Alene mining district to search for ore veins, based on the belief that a change in rock color from dark to light was related to the solutions that introduced ore minerals into metasedimentary rocks (Mitcham 1952; Wallace and Hosterman 1956). Many mining prospect pits are scattered across the APE because of the geologic setting.

Most of the APE is bedrock with a thin covering of soil. Unconsolidated sediments, which include alluvial fan deposits, mass wasting colluvium from landslides and debris flows, river and creek alluvium, and glacial deposits from Pleistocene alpine glaciers, are generally limited to valley floors and walls in the mountainous vicinity (Harrison et al. 1986). Naturally deposited unconsolidated deposits are not expected in the APE, with the exception of peat that may be present at one wetland that crosses the Mullan Road.

Soils data available for portions of the St. Joe National Forest in the project vicinity indicate that soils of the Honeyjones silt loam and Latour gravelly silt loam varieties are in the APE. These soils are usually less than 40 inches thick because they form in volcanic ash overlying colluvium and talus derived from metasedimentary argillite, quartzite, and phyllite rock on mountain slopes (Weisel 2002).

Climate, Vegetation, and Wildlife

Paleoclimatic conditions in the region have been inferred from past pollen studies that provide evidence of a much cooler and moister climate ca. 11,000 years ago following final retreat of the Pleistocene glaciers (Clague 1980, 1981; Porter 1978; Porter and Denton 1967). The cool ice age conditions affected unglaciated areas south of the ice margin by causing soil to waste off the high ridge crests and downslope during summers, a process called solifluction. After ice retreat, the region warmed and more moderate temperatures ensued by ca. 8,000 years ago. The temperate trend was followed by another episode of climatic cooling from 4,000 years ago to the present (Mattson et al. 1983).

Douglas-fir dominated the montane forest of the APE throughout the Holocene. Associated trees include ponderosa pine, lodgepole pine, subalpine fir, and spruce in dry areas and western larch, white fir, quaking aspen, western birch, and Rocky Mountain maple in wetter areas. Dominant understory in moist areas is snowberry and Oregon boxwood. Sedges, pinegrass, Idaho fescue, big sagebrush, beargrass, mountain Heather, huckleberry, and northern sage are found in wetter areas. The transition to a woodland environment is lower in elevation than the APE. The woodlands surrounding the APE include open ponderosa pine, lodgepole pine, and Douglas-fir forests with an understory of snowberry, bitterbrush, big sagebrush, Idaho fescue, blue wildrye, and bluebunch wheatgrass. Edible plants that may have been attractive to native inhabitants in the area include camas, bitterroot, balsamroot, yellowbells, wild onion, and whitebark pine (Munger 1994).

Mammals currently or formerly in the APE include mountain lion, lynx, bobcat, black bear, grizzly bear, raccoon, river otter, weasel, skunk, gray wolf, coyote, wolverine, red fox, badger, and other rodents. Elk, mule deer, moose, mountain sheep, hares, rabbits, marmot, squirrel, muskrat, and beaver were also historically present and were likely hunted (Munger 1994). Migratory waterfowl historically found along the rivers and on nearby lakes and resident species might have included blue and ruffed grouse. A variety of resident fishes occur in the streams, rivers and lakes, as well (Chatters 1998). Bison, pronghorn, and white-tailed deer were historically available at lower elevations, especially east of the Continental Divide.

Cultural Setting

Pre-Contact Period

The prehistory of the Lookout Pass area is characterized by roughly 10,000 years of hunter-gatherer land use resulting in temporary occupation sites, lithic scatters, rock cairns, vision quest sites, burials, and culturally modified trees. These sites are the result of seasonal subsistence activities and other forms of land use including lithic procurement and spiritual endeavors. Major occupation sites are usually limited to the nearby Coeur d'Alene, Clark Fork, and St. Regis River drainages, but hunter-gatherers frequented higher elevation mountainous areas during the summer months to hunt and to collect and process roots, seeds, and berries. Expectations for cultural materials that may be present in the APE depend on the age of the site.

The APE is at a crossroads of cultures. As a result, the culture histories of both the Columbia Plateau (Leonhardy and Rice 1970) and the Northern Plains (Frison 1978; Greiser 1984; Reeves 1974) apply to the area (Munger 1993, 1994). These culture histories are combined by McLeod and Melton (1986) to

include Early Prehistoric (12,000–7,500 years ago), Middle Prehistoric (7,500–1,500 years ago), and Late Prehistoric (1,500– ca. 300 years ago) periods with regional variants and phases within these larger traditions. Each phase represents changes in artifact assemblage, land use, and settlement patterns as the inhabitants of the region responded to climate shifts, new technologies, and the arrival of new people (Mattson et al. 1983).

The Early Prehistoric period refers to a time when broad spectrum foragers dispersed through most topographic zones. The earliest known inhabitants of the region, often referred to as Paleoindians, were highly mobile hunter-gatherers that organized in extended families or multi-family bands to exploit large and small game and plant resources (Frison 1978). The Early Prehistoric period includes the Windust and early Cascade phases in what is now Idaho, and the Clovis, Folsom, Llano, Plano, Hell Gap, and Cody complexes in what is now Montana (Leonhardy and Rice 1970; McLeod and Melton 1986; Munger 1994). The earliest archaeological sites in the region are typically on high terrace landforms along rivers and include cryptocrystalline silicate (CCS) and basalt projectile points, large oval knives, numerous modified flakes, end scrapers, and a variety of cobble tools (Sappington 1994; Sims 1971). Hafting technologies and changes in projectile point shape from fluted to lanceolate are noted when comparing sites dating to the beginning and end of the Early Prehistoric period (Frison 1978). Slight adaptations are observed between open country sites where bison were hunted and mountain sites where more broad-based hunting and gathering occurred (Knight 1989).

The climate warmed in the middle Holocene, and related changes in subsistence practices and technology mark the transition to the Middle Prehistoric period (Knight 1989; Roll and Hackenberger 1998). The Middle Prehistoric period is characterized by population aggregation, with an intensification of the use of root crops and riverine resources, and hunting of a wider variety of animals, such as pronghorn, bison, and mule deer (Frison et al. 1996; Greiser et al. 1985; Knight 1989). The Middle Prehistoric period includes the late Cascade, Tucannon, and early Harder phases in Idaho and the Archaic Mummy Cave, Oxbow, McKean, Hanna, and Pelican Lake complexes in Montana (Leonhardy and Rice 1970; Munger 1994). Large side-notched projectile points found at Middle Prehistoric period sites represent a shift away from throwing spears to the use of atlatls. Lanceolate, indented base, and stemmed indented base projectile points, small basalt scrapers, modified cobble spalls, pounding stones, sinkers, mortars and pestles, digging sticks, and bone tools have also been identified at Middle Prehistoric period archaeological sites (Frison et al. 1996; Kennedy 1976; Knight 1989). This period marks initiation of the ethnographic pattern of winter villages that often included several semi-subterranean pit houses in Idaho, while villages to the east hosted a wider variety of dwelling types, such as hide-covered pointed pole lodges.

The Late Prehistoric period is characterized by an expansion in the number of villages that coincided with the shift from hunting with atlatls to the use of bows and arrows. The Late Prehistoric period includes the late Harder and Piqunin phases in Idaho, and the Keaster II, Besant, Avonlea, Prairie Side Notched, and Plains Side Notched complexes, and the Old Women's phase in Montana (Greiser 1994; Reeves 1969; Sappington 1988). Sites dating to the Late Prehistoric period were often on floodplain terraces and usually include small CCS end scrapers, knives, and net sinkers in addition to the distinctive small side-notched concave-base arrow points (Greiser 1984; Knight 1989). Notching styles at the youngest Late Prehistoric period sites are highly variable, and there are many local variant styles (Greiser 1984). Pottery and carved stone vessels are occasionally identified at eastern sites dating to the Late Prehistoric period due to influence of the neighboring Shoshone (Ferguson 2000; Frison 1991; Mulloy 1958). Late Prehistoric period bison jump and kill sites and associated rock alignments are more common in Montana, whereas deer were the focus of hunters in the mountains west of Lookout Pass (Frison et al. 1996; Greiser 1984). Archaeological data from Late Prehistoric period sites in the region suggest indigenous population peaked between 800 and 700 years ago.

Archaeological sites dating to between 300 and 200 years ago often contain Euro-American trade goods mixed with traditional artifacts. In Idaho, these sites belong to the Numipu phase, and in western Montana, contact-era sites are referred to as Protohistoric period sites (McLeod and Melton 1986; Sappington 1994). Whether called Numipu or Protohistoric, these sites are marked by the introduction of the horse. This period ends with sustained contact with Euro-Americans.

Ethnohistory

The Coeur d'Alene Valley has drawn human residents and visitors for thousands of years because it is a natural travel corridor that is rich with resources. Lookout Pass is at the east margin of the traditional territory of the Coeur d'Alene people, an Interior Salish-speaking group who occupied at least 4,000,000 acres centered on Lake Coeur d'Alene and the Coeur d'Alene, St. Joe, St. Maries, and Spokane Rivers (Teit 1930). The largest Coeur d'Alene village was reportedly at the outlet of Lake Coeur d'Alene, where a fish trap spanned the Spokane River (Palmer 1998; Palmer et al. 1987; Ray 1936). Neighbors of the Coeur d'Alene included the Kalispell, Kutenai, Flathead, Nez Perce, Pend d'Orielle, Colville, Spokane, Northern Paiute, Shoshone-Bannock, and other tribes (Walker 1978). Assemblages from Coeur d'Alene archaeological sites indicate ties to groups from the Columbia Plateau, British Columbia, and the northern Rockies in Montana.

Ethnographic evidence suggests the Coeur d'Alene people, as well as their neighbors, lived in mat-, bark-, or skin-covered lodges, but the presence of housepits at archaeological sites in the St. Joe River Valley signals that pit houses may have also been used. Groups wintered in permanent villages on the lakes and rivers (Palmer et al. 1987; Teit 1930). Villages broke into smaller bands in the spring to trap and catch fish. In late summer, roots, berries, and other plants were gathered. In early fall, the smaller bands traveled to salmon fishing sites, whereas white fish, trout, squawfish, mussels, and snails were locally available (Peltier 1975). Small groups also left in the fall and traveled east for buffalo hunts on the Great Plains (Teit 1930). People who remained in the area converged on their winter villages and had large hunts for deer and elk.

The closest known named places are west of Lookout Pass (Palmer 1987). *Hntsegwish*, meaning "where it imitates," may refer to the Little Coeur d'Alene River before its confluence with the Coeur d'Alene River. Downstream, the Coeur d'Alene River was called *Hnq'wtutumshkwe'*. Little Plummer Peak on Cataldo Mountain was called *Ałq'uq'wt'ut* by the Coeur d'Alene. The Old Cataldo Mission was built at the village site of *Sq'wt'u*. A place near Wallace may have been called *Niłaq'qn*, which means "wide forehead" or "wide surface under the hair," likely referring to the wide mountain range that includes Lookout Pass. The headwaters of the St. Joe River south of Lookout Pass are known as *Amotqn*, or "one who presides at the head," and they relate to a mythological story (Palmer 1987).

Lookout Pass is on a native trail route through the Rocky Mountains between the Great Plains and the lower Columbia River basin. In addition to being an important point along a travel corridor, the Lookout Pass area also provided Native Americans with areas for hunting and resource gathering. The trail allowed for exchanges of ideas and materials between Columbia Plateau and Great Plains groups. Introduction of the horse changed the organization and interaction of these groups. Horses permitted larger gatherings, created wealth differences, allowed for expanded knowledge of the region, permitted the spread of disease, and increased warfare (Walker and Sprague 1998). For example, Shoshone groups moved into what is now western Montana in the late 1700s (McLeod and Melton 1986).

During the 1850s, rumors of a military road being constructed following this trail spread into the Coeur d'Alene region. Reports of increasing Euro-American settlement from the west and pressures of outside tribes from the east created great apprehension among the Coeur d'Alene. Certain bands decided to fight the Euro-Americans rather than yield to settlement. Battles between the United States military and Native

Americans in the Spokane Valley in the mid-1850s ended with the destruction of Indian-owned crops, cattle, and horse herds (Seltice 1990). Because of their involvement in the wars, a harsh settlement was planned for the Coeur d'Alene Tribe. Jesuit priests at Cataldo Mission interceded on behalf of the Coeur d'Alene and the tribe was assigned a reservation around Lake Coeur d'Alene, but their new lands encompassed only a fraction of their traditional territory (Adams 1999; Dahlgren and Carbonneau-Kincaid 1996; Palmer 1998). The Coeur d'Alene Reservation was established in 1873 near the southwest border of their former territory. The reservation was reduced in size two times, once in 1885 and again in the early 1890s. In 1906, tribal members were allotted land and the reservation was opened to non-tribal settlement in 1909 (Palmer 1998).

The rumored military road, called the Mullan Road, became a reality in the late 1850s, creating a relatively easy route for miners, settlers, and military personnel passing through the Coeur d'Alene region (Mullan 1863); the road is further discussed in the following section. Despite the influx of outsiders, pioneers who traveled along the Mullan Road noted that local Native Americans, including the Coeur d'Alene, continued to use the route to travel across St. Regis Pass after the road was completed (Rumley 1862).

Historic Period

EXPLORATION AND DEVELOPMENT OF THE MULLAN ROAD

Between 1853 and 1855, Washington Territorial Governor Isaac I. Stevens led the survey efforts to identify a railroad route along the northern tier of the United States. Stevens assigned U.S. Army Lieutenant John Mullan to survey the Continental Divide segment for a "practical route" (Krueger 1964). After learning of a way through the Bitterroot Mountains from local Indians and missionaries, Mullan identified a route through the Coeur d'Alene and St. Regis Borgia Valleys. In May 1858, following the Yakama War and the Mormon War, Mullan was subsequently ordered to begin construction of a military wagon road to connect Fort Benton on the Missouri with Fort Walla Walla in the Washington Territory, near the Columbia River (Mullan 1863; Rice Brown 1994). Mullan began the project at the western end, at Fort Walla Walla; however, road construction through this region required intensive surveying, clearing, and cut and fill work, and only a few miles were completed before the Indian War of 1858 broke out (Bemis 1923). Mullan suspended his work for 4 months; road building resumed in 1859 after the end of fighting. By the end of the 1859 field season, the construction party had reached the St. Regis River Valley, crossing the Bitterroot Mountains at Sohon Pass (now called St. Regis Pass) (Mullan 1863; Strachan 1861), After spending the winter in the valley, Mullan's crew continued eastward, and in the spring of 1860, completed the road to Fort Benton (Winther 1945:26). That summer, soldiers began using the road to move to forts in the Oregon and Washington territories (Bemis 1923:204). However, by the winter of 1860, Mullan concluded that marshy conditions, seasonal flooding, and a wide river crossing could render sections of the route impassable, and he began to plan the road's reroute and repair. In 1861, he led construction of a new section of road north of Lake Coeur d'Alene and repaired and improved existing stretches of the road that suffered from poor drainage. Road construction was completed along the route in 1862.

Although the road was initially planned for the military, it became one of the primary routes used by miners and businesses to provision the mining camps and towns that sprang up following the discovery of gold in the area that would become southwestern Montana.

MINING

Gold was discovered in Montana in the early 1850s, and the completion of the Mullan Road in 1860 provided a route for prospectors from the Pacific Northwest to begin to move into the region. In addition to the prospectors who traveled the route, teams of pack mules and wagons were regularly employed to transport goods over the Mullan Road to supply the growing population of miners in Montana (Winther 1945). By the mid- to late 1860s the flow of people and goods over the Mullan Road into Montana had slowed in the response to increasing competition from shippers based out of Missouri, and the completion of the first transcontinental railroad in 1869; however, the presence of the Mullan Road continued to spur development along its route (Winther 1945). Miners began prospecting along the Mullan Road in the Coeur d'Alene and St. Regis River drainages, and in 1865, the first gold claim was filed along the St. Regis River (Mineral County Historical Society 2004:3). Prospectors working in the South Fork Coeur d'Alene River Valley began staking gold claims in the early 1880s, and by the early 1890s, miners had branched out into extracting silver, lead, and zinc from hard rock mines along the valley (Dahlgren and Carbonneau-Kincaid 1996; Miller 1884; Smith 1932; Teske et al. 1961; Wood 1983). The establishment of claims along the valley bottoms pushed later prospectors higher into the mountains and passes during the late 1890s and early 1900s.

According to the U.S. Geological Survey (USGS), the Mullan Road was still occasionally used in the early 1900s (Ransome and Calkins 1908). The Mullan Road was also a prominent feature recorded on maps and surveyor's notes from the period. In July 1904, a land surveyor contracted by the General Land Office to survey Idaho-Montana boundary line reported crossing the Mullan Road (Krueger 1964:5-7). The 1904 map illustrating the Idaho-Montana boundary survey markers also depicts the route of the Mullan Road route over St. Regis Pass (Figure 4). General Land Office maps and field notes from 1911, 1914, 1916; the Coeur d'Alene National Forest Map (1911); and some USGS maps up through 1939 continue to illustrate a route through St. Regis Pass, which corresponds to the location of the Mullan Road (Krueger 1964:8-10), although there is no evidence to suggest that the Mullan Road was still used after the early 1900s.

In the summer of 1910, over 1,700 fires burned through western Montana, northern Idaho, and into eastern Washington. Fire reached Lookout Pass in late August and burned through the South Fork Coeur d'Alene and St. Regis River Valleys, destroying most of the local communities and infrastructure (Mineral County Historical Society 2004:3).

TRANSPORTATION

The Northern Pacific Railroad completed their Coeur d'Alene branch line to Wallace, Idaho, by 1890, and the line was extended east in the early 1900s to service the mines that lined the South Fork Coeur d'Alene and St. Regis River Valleys. The line from Mullan, Idaho, to St. Regis, Montana, was abandoned in 1980. All of the rails and ties were removed, and the Forest Service currently maintains an access road along the grade north and south of the APE. The highway that eventually became I-90 was constructed through the Lookout Pass area in 1922, allowing people from Idaho and Montana to more easily visit the area (Cohen 2007:201).

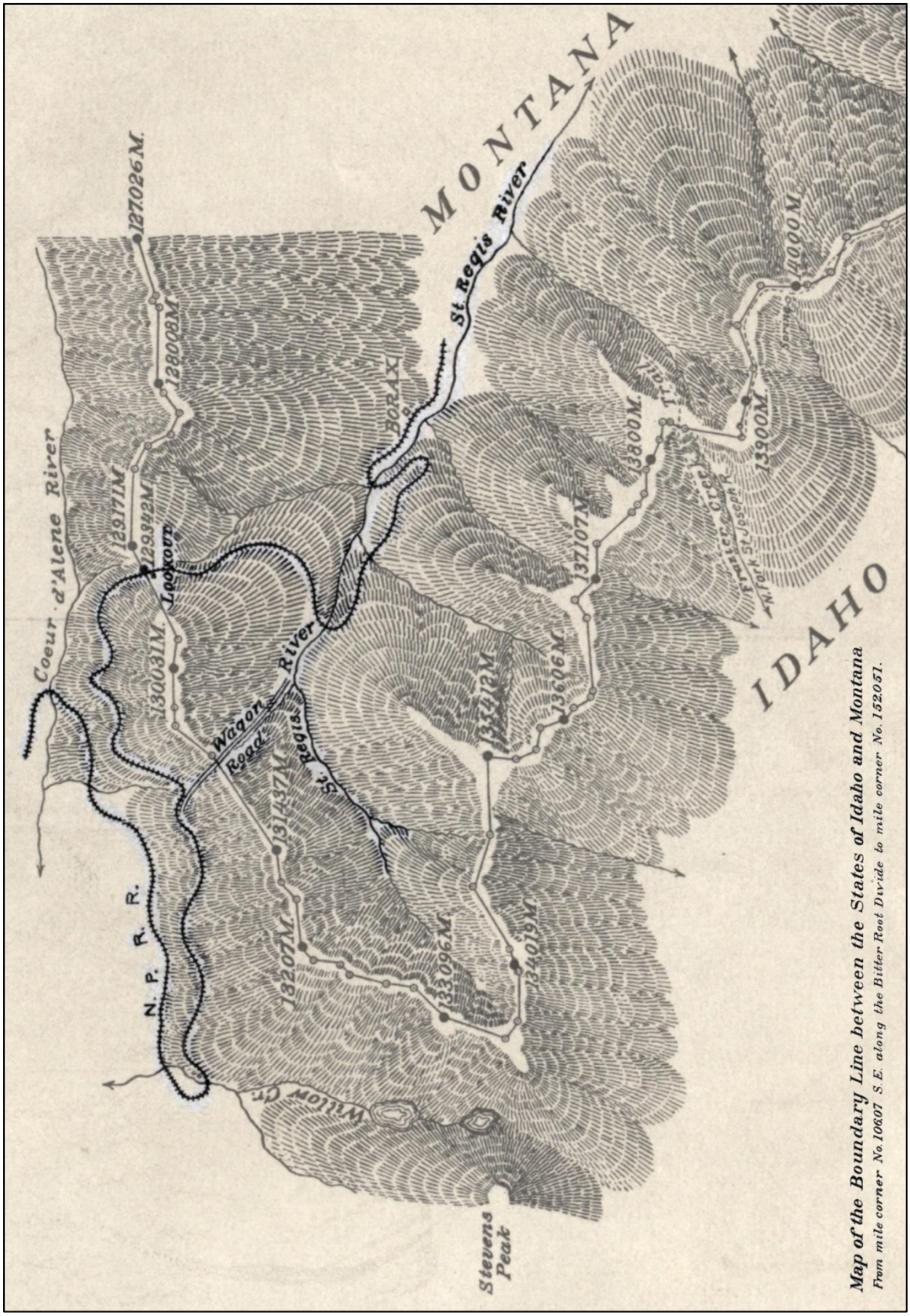


Figure 4. Map illustrating the route of the Mullan Road over St. Regis (Sohon) Pass, 1904.

RECREATION (SKI AREA DEVELOPMENT)

In the 1930s, local skiing enthusiasts built a number of small facilities at Lookout Pass to encourage recreational downhill skiing at the pass. In May 1941, the Forest Service assigned a Civilian Conservation Corps (CCC) crew to build a permanent ski lodge at Lookout Pass. The Lookout Pass ski lodge was completed and opened in December 1941 and was managed by the Idaho Ski Club (Cohen 2007:201). Following the end of World War II, the ski club installed additional facilities, including rope tows to the top of Runt Mountain, and the first lift was installed in 1956. The ski club expanded the lodge in 1961 and continued adding and improving the lifts. In 1992, the ski club sold the facilities to a private corporation, and the Lookout Associates, LLC acquired the facility in 1999 (Cohen 2007:205).

Previous Cultural Resources Investigations

Fifteen cultural resources investigations have been conducted within 1 mile of the APE. Seventeen historical cultural resources were identified as a result of these investigations. Only four of these resources are in the APE; they are summarized at the end of this chapter.

IDAHO

Nine cultural resources investigations have been previously conducted within 1 mile of the Idaho portion of the APE. Most were completed by or on the IPNFs. These projects included construction or upgrades to facilities and utilities, as well as timber sales and safety improvements. Table 2 summarizes these projects.

Table 2. Previous Cultural Resources Investigations Completed in Idaho within 1 Mile of the Area of Potential Effects

Date	Author	Title	Relationship to the APE	Results Identified within 1 Mile of the APE
1986	Holstine	Eleven Fly Yards and Three Gravel Quarry Sites on BPA's Taft-Bell 500 KV Transmission Line, BPA	0.50 mile north	None.
1987a	Sims	Wallace Ranger District Facilities	0.70 mile north	10SE749 (Shoshone Park Historic Structures).
1987b	Sims	Sale of Lookout Ski Lodge	In the APE	10SE790 (Lookout Pass Ski Lodge).
1988	Boreson	BPA's Taft-Bell Transmission Line Project – Western Montana to Northeastern Washington	0.50 mile north	10SE888 (NP railroad bed).
1992	Ritchie	Snowstorm Daisy Timber Sale	Adjacent	10SE1002 to 10SE1005, 10SE1007, 10SE1008, 10SE888 (NP Railroad Bed), and 10SE1189 (the Mullan Road).
1996a	Sims	Clearwater Realty-Upper Priest Lake Land Exchange	1 mile northwest	10SE1154 (mining claim).
2002	Greiser	Addendum: Touch America/AT&T Fiber Optic Cable Route Along I-90	In and adjacent	10SE888 (NP Railroad Bed).
2005	Ray et al.	Avista Transmission Line	0.75 mile north	None.
2009	Matz	Shoshone Cabin Well	0.75 mile north	Revisited 10SE749 (Shoshone Park Structures), 10SE1002 (cabin remnants), and 10SE1007 (mining camp/ditch).

From these previous investigations, 11 cultural resources have been recorded within 1 mile of the APE in Idaho (Table 3). An additional resource, St. Regis Pass (79-1232), was noted on the Idaho State Historic Preservation Office's (SHPO's) early historical sites input data sheets, the precursor to Idaho's site inventory forms, because it was the "Summit of the Mullan road [sic] through the Bitterroot Range" (Idaho SHPO ca. 1975). For the purposes of this project, it is part of the Mullan Road. All of the previously recorded sites are historical, and most are related to the mining industry. Other recorded sites are related to development of the area by the CCC and transportation.

Table 3. Cultural Resources Recorded in Idaho within 1 Mile of the Area of Potential Effects

Site	Recorder/Date	Description	Relationship to APE
79-1232	Idaho SHPO (ca. 1975)	St. Regis Pass, summit of the Mullan Road in Bitterroots.	In the APE
10SE749	Sims (1987c); Bolton and Hubber (1990)	Cabin, garage, and two picnic shelters (Shoshone Park).	0.7 mile north
10SE790	Sims (1986)	Lookout Pass Ski Lodge.	In the APE
10SE888	Ritchie (1991a); Greiser and Hagen (2000)	Northern Pacific Railroad Bed (79-18063).	In the APE
10SE1002	Ritchie (1991b)	Historic cabin remnants.	0.5 mile northwest
10SE1003	Ritchie (1991c)	Historic habitation remnants.	0.5 mile northwest
10SE1004	Ritchie (1991d)	Historic cabin remnants.	0.5 mile northwest
10SE1005	Ritchie (1991e)	Historic mining adit (collapsed).	0.75 mile west
10SE1007	Ritchie (1991f)	Historic mining camp/placer ditch (Remnants) with two cabins, a ditch, and artifacts dating 1900–1905.	0.5 mile northwest
10SE1008	Ritchie (1991g)	Historic timber extraction area with chutes and skid trails.	0.25 mile west
10SE1154	Sims (1996b)	Mining claim.	1 mile northwest
10SE1189	Ritchie (1991h)	Historic wagon road (Mullan's Military Road).	In the APE

Sims (1996b) recorded a mining claim as 10SE1154 on land homesteaded by Louis Theodore Nystromin northwest of Lookout Pass in 1926. The claim consists of a pit containing collapsed timbers, a board pile, and the outline of a structure and a discovery trench. Sims (1987c) also recorded Shoshone Park Picnic Area (10SE749) northwest of the APE. Shoshone Park contains an historical cabin, garage, and two picnic shelters constructed in rustic style in 1936 by the CCC, which are eligible for the National Register of Historic Places (NRHP). The site was nominated because of its association with planned development of the recreational potential of federal forested land (Bolton and Hubber 1990). Sims (1986) also recorded the Lookout Pass Ski Lodge as 10SE790 in the APE. The ski lodge was built in 1941 by the CCC. The lodge has been remodeled at least twice in 1960 and 1985. Still, this ski lodge is significant because of its rustic architecture and its association with the CCC.

A segment of the old Northern Pacific Railroad (now Burlington Northern) line from St. Regis, Montana, to Mullan, Idaho, was recorded as 10SE888 (Ritchie 1991a). This segment was abandoned in 1980, and the rails and ties were removed. This segment is part of a larger system that was determined eligible for the NRHP, but this particular segment lacks architectural and functional integrity because the rails and ties were removed. Today, the old grade functions as NFS Road 3026.

IPNFs Archaeologist Carl Ritchie also recorded several historical archaeological sites northwest of the APE along the south edge of the South Fork Clark River Valley. These include 10SE1002 (historic cabin remnants) (Ritchie 1991b), 10SE1003 (historic habitation remnants) (Ritchie 1991c), 10SE1004 (historic

cabin remnants) (Ritchie 1991d), 10SE1005 (collapsed historic mining adit) (Ritchie 1991e), 10SE1007 (historic mining camp/placer ditch remnants) (Ritchie 1991f), 10SE1008 (a historic timber extraction area) (Ritchie 1991g), and 10SE1189 (historic wagon road, Mullan's Military Road) (Ritchie 1991h). The Mullan Road dates to the 1860s, whereas the mining sites are probably younger, dating to ca. 1900 or 1910. A few of the mining sites, such as 10SE1005, also have artifacts dating to the 1890s that are associated with the railroad.

MONTANA

Six cultural resources investigations have been previously conducted within 1 mile of the Montana portion of the APE. Most of these projects were associated with Forest Service undertakings, including trails, tree removal, parking areas, and mining related activities. Other projects were related to installation of fiber optic lines and utility transmission lines.

Table 4. Previous Cultural Resources Investigations Completed in Montana within 1 Mile of the Area of Potential Effects

Date	Author	Title	Relationship to APE	Results
1983a	Matthew and McLeod	St. Regis Basin Small Sale Proposed Cross Country Ski Route	0.25 mile south	24MN133 (Mullan Road) and 24MN137 (Sildex Mine).
1984b	Matthew and McLeod	St. Regis Basin Drill Tests	1 mile south	None.
1984a	Matthew and McLeod	Copper Gulch Mining Exploration	1 mile south	24MN150 (Leslie Adit), 24MN151 (Copper Lake Crib Dam), and 24MN152 (mining cabin).
1985	McLeod	Ski Area Salvage Timber Sale Area	Adjacent to southern boundary	Revisit 24MN133 (Mullan Road) and record 24MN120 (Northern Pacific Railroad segment).
2000	Greiser et al.	Touch America/AT&T Fiber Optic Cable Route between Billings and Lookout Pass in Montana	Adjacent to the APE, along I-90	Large regional inventory of hundreds of sites; addressed 24MN133 (Mullan Road) and 24MN120 (Northern Pacific Railroad segment).
2010	Reininghaus et al.	Summer Trails Environmental Assessment	1 mile south	Revisit of East Coeur d'Alene Mine (24MN38), Gold Chrome Mill (24MN97), Wabash Mine (24MN125), Meadow Mountain Mine (24MN132), Sildex Mine (24MN137), Dominion Peak Lookout (24MN139), Leslie Adit (24MN150), 24MN151, 24MN152, 24MN162, and 24MN215.

From the previous investigations, six cultural resources were identified within 1 mile of the APE in Montana (Table 5). All of the resources are historical and associated with transportation or mining.

Table 5. Cultural Resources Recorded in Montana within 1 Mile of the Area of Potential Effects

Site	Recorder/Date	Description	Relationship to APE
24MN120	Matthew (1985)	Northern Pacific Railroad Bed (Lookout Pass to Sildex Mine).	In the APE to 0.5 mile south
24MN133	Munger (1985)	Mullan Road segment (Sohon Pass to Sildex Mine).	In the APE
24MN137	Matthew and McLeod (1983b)	Sildex Mine.	1 mile south

Table 5. Cultural Resources Recorded in Montana within 1 Mile of the Area of Potential Effects

Site	Recorder/Date	Description	Relationship to APE
24MN150	Bacon (2010a); Matthew and Munger (1984a)	Leslie Adit.	1 mile south
24MN151	Bacon (2010b); Matthew and Munger (1984b)	Cooper (Sildex) Lake Dam.	1 mile south
24MN152	Matthew and Munger (1984b)	Mining cabin.	1 mile south

The inventory form for the Lookout Pass to Sildex Mine segment of the Northern Pacific Railroad Bed (24MN120) provides no description of this site within the Lookout Pass Ski and Recreation Area APE. The site was considered not eligible for the NRHP because it lacked track and rail (Matthew 1985; McLeod 1985). The Mullan Road (24MN133), discussed above in the Idaho section, was a military road built between 1858 and 1861 that later became recognized as the first wagon route through the northern Rocky Mountains (Munger 1985). Although construction of this dirt road was a vast improvement over trails, it suffered from flooding rivers and lakes, and segments were soon upgraded with bridges and wooden culverts or rerouted to more favorable pathways.

The Sildex Mine (24MN137), an NRHP-eligible property, includes seven structures and large tailings piles. Nearby sites 24MN150, 24MN151, and 24MN152 are probably associated with the Sildex Mine. The Leslie Adit (24MN150) is a collapsed mine adit, a large tailings pile, a burnt cabin, and scattered trash debris. A dam constructed from rubble and log (24MN151) is at the outlet of Sildex Lake. The dam turns what would be a wet bog into a lake that was likely used by the Sildex miners. A collapsed mine adit, a large tailings pile, a collapsed cabin, three sections of mine rail, and seven hand drills varying from 18 to 30 inches in length are at 24MN152.

SUMMARY

Four previously recorded resources are in the Lookout Pass Ski and Recreation Area APE (Table 6). Three are transportation-related sites, the Mullan Road and associated St. Regis Pass, and the Northern Pacific Railroad Bed in Idaho and Montana. Although St. Regis Pass was identified in only Idaho, it does extend into Montana. The final previously recorded resource in the APE is the Lookout Pass Ski Lodge, located just west of the Idaho-Montana border.

Table 6. Summary of Previously Identified Resources in the Area of Potential Effects

Site	Name	Build Date	Description	NRHP Status
79-1232	St. Regis Pass	N/A	Summit of Mullan Road through the Bitterroot Mountains.	Presumed eligible as part of the Mullan Road.
10SE790	Lookout Pass Ski Lodge	1941	Built by the CCC in Rustic style characteristic of the program. Additions in 1960 and 1985.	Eligible (Sims 1986).
10SE888/ 24MN120	Northern Pacific Railroad Bed	1891	Railroad grade, ties, and rails removed.	Idaho segment, eligibility is unclear; part of a larger system considered eligible (Greiser and Hagen 2000). Montana segment, not eligible (Matthew 1985; McLeod 1985); other segments have been considered eligible (Platt 1996).

Table 6. Summary of Previously Identified Resources in the Area of Potential Effects

Site	Name	Build Date	Description	NRHP Status
10SE1189/ 24MN133	Mullan Road	1859–1861	Military road from Fort Walla Walla to Fort Benton.	Eligible (Greiser et al. 2000:39; Ritchie 1992).

METHODS

SWCA conducted this cultural resources assessment under a U.S. Department of Agriculture, Forest Service Permit for Archaeological Investigations, Authorization ID WAL78, issued by the IPNFs and recognized by the LNF (Attachment A). The strategies for the Lookout Pass Ski and Recreation Area cultural resources assessment were developed to comply with the *Idaho Panhandle National Forest Heritage Guidelines, Site Investigation Strategy* (SIS) (Idaho Panhandle National Forests 2007), and the *Site Identification Strategy* (SIS) for the Bitterroot, Flathead, and Lolo National Forests (McLeod et al. 2003), as well as the guidelines and procedures of the Idaho and Montana SHPOs. These Forest Service documents provide guidance for field surveys, including determining high, moderate (medium), and low probability for the occurrence of pre-contact and historical sites through variables such as land form, soil, slope, vegetation, access to water, solar exposure, food sources, and knowledge of previous activities. The intensity, or transect interval, of a field survey was determined by the high, moderate, or low probability for site occurrence. This varied slightly by forest and is discussed below.

Prefield research was conducted by SWCA's Lorelea Hudson and Simone Carbonneau-Kincaid. The field survey was conducted from June 9 through June 15 and was led by SWCA's Ross Smith, with Cyrena Undem, Donald Tatum, and Nathan Jereb as the field crew. This report was prepared by SWCA authors Ross Smith, Brandy Rinck, and Lorelea Hudson, and by SWCA geographic information systems graphics staff Johonna Shea, Erik Anderson, and Catherine Smith.

The methods discussion below is divided by state to allow for easier review by state and federal agencies. Some information may be repeated from one state to another, but this is kept to a minimum by discussing common methods in one section.

Idaho (Idaho Panhandle National Forests)

Prefield research began with a request for project and site records from the Idaho SHPO (Records Search No. 13268). Shawn Gibson (IPNFs forest archaeologist) and Bruce Gibson (IPNFs zone archaeologist) from the St. Joe Ranger District provided access to, as well as digital copies of, reports and inventory forms in their offices. Jill Wagner, Tribal Historic Preservation Officer (THPO) for the Coeur d'Alene Tribe was contacted, and Ms. Carbonneau-Kincaid visited the THPO office to review archival materials pertinent to the project. She also visited with Bob Dunsmore, of Mullan, Idaho, who has studied the Mullan Trail for many years. Other information was collected from the Museum of North Idaho, SWCA's Seattle Office's library, and from historical Forest Service maps and other maps, General Land Office survey plats and notes, ethnographic and historical accounts, and natural history documents.

Information gathered during prefield research, along with Forest Service guidance, was used to identify high, medium, and low probability for the identification of pre-contact and historical sites (Figure 5). The IPNFs' SIS outlines specific survey strategies for each probability area.

The pedestrian field survey used transects spaced no more than 30 meters (m) apart, depending on the probability for cultural resources. Survey coverage focused on areas where ground disturbance was anticipated and was intended to be 100 percent in the APE where possible; however, slopes so steep that surveyor safety could not be assured were excluded. The survey was documented with photographs, field notes, maps, and a handheld Trimble GeoXT6000 global positioning system (GPS). No cultural materials were collected.

Redacted from public version.

Figure 5. High, medium/moderate, and low site probability identified areas in the proposed disturbance areas in the APE.

Montana (Lolo National Forest)

SWCA staff requested a records check at the Montana SHPO and contacted Sydney Bacon, LNF archaeologist, to collect information on previously recorded sites and projects within 1 mile of the APE. More recently, Erika Karuzas, West Zone archaeologist with the LNF, was contacted about the field survey schedule and to gather information about the Mullan Road. Ms. Carbonneau-Kincaid also visited the Mineral County Historical Society Museum and spoke with Catheryn Kay Strombo, as well as Jim Cyr, another long-time researcher of the Mullan Road. The results of these searches, along with additional background research into the prehistory, ethnography, history, and natural resources; review of historical maps and photographs; and knowledge of the area were used to identify areas of high, medium, and low probability for site identification. The SIS outlines specific survey strategies for each probability area, as follows:

- High probability areas will receive 100 percent pedestrian survey coverage using transects spaced approximately 15 m apart.
- Medium probability areas will receive 50 percent pedestrian survey coverage using transects spaced no more than 30 m apart.
- Low probability areas will receive 10–20 percent pedestrian survey coverage and will likely be surveyed while walking between moderate and high probability areas.

The field survey focused on areas of ground disturbance, as described above. Slopes so steep that surveyor safety could not be assured were excluded. The survey was documented with photographs, field notes, maps, and a handheld Trimble GeoXT6000 GPS. No cultural materials were collected.

Common Field Survey Methods

Thick vegetation limited ground surface visibility in nearly all portions of the APE; therefore, pedestrian survey transects were used 1) to identify historic period sites and landforms or features on the landscape with increased potential to contain archaeological deposits, and 2) to identify and examine all areas in the APE where mineral soils were exposed, such as in tree throws, around burrows, and along trails and previously developed access roads. Transects were spaced no more than 30 m apart and closer together in higher probability areas.

Shovel probes were excavated at approximately 20-m intervals to identify sites, and at narrower intervals to define site boundaries. Shovel probes typically measured 30–40 centimeters (cm) in diameter, spoils were screened through ¼-inch mesh, and notes were recorded regarding the content and characteristics of sediments encountered in each shovel probe (Attachment B).

Archaeological resources, both sites and isolates, were recorded on Archaeological Survey of Idaho (ASI) or Montana Historic Property Record site inventory forms, which included a written description of the site and its setting, a sketch map, location on a USGS 7.5-minute quadrangle, and photographs. Historical standing buildings or structures were recorded on Idaho Historic Sites Inventory (IHSI) database forms, which include an architectural description, a sketch map, location on a USGS 7.5-minute quadrangle, and photographs. Universal Transverse Mercator (UTM) coordinates were collected for all recorded resources. Digital photographs were taken of the APE and of all recorded sites from various directions and distances during fieldwork. Subject, direction of view, and other comments were recorded on photo logs. A hand-held Trimble GeoXT6000 GPS was used to collection locational data for shovel probes, site boundaries, and other observed features in or adjacent to the APE. SWCA daily work records describing field conditions, procedures, and contacts were also completed.

The Forest Service previously identified and recorded segments of the historic Mullan Road (10SE1189/24MN133) in the APE. Identified segments of the road in the APE were documented with photographs, GPS, and field notes, describing the road width, road depth, and vegetation on and adjacent to the road.

Site Evaluation

The significance of identified resources was evaluated using the NRHP criteria for significance and integrity. Properties qualify for the NRHP if they are least 50 years old, and meet at least one of four criteria of eligibility (36 CFR 60.4):

- (A) Association with events that have made significant contributions to the broad patterns of our history.
- (B) Association with the lives of persons significant in our past.
- (C) Embodiment of the distinctive characteristics of a type, period, or method of construction; or representation of the work of a master; or possession of high artistic value; or representation of a significant and distinguishable entity whose components may lack individual distinction.
- (D) Has yielded or may be likely to yield important information about the past.

NRHP-eligible properties must also possess characteristics of integrity, including location, design, setting, materials, workmanship, feeling, and association.

Assessment of Effects

The project would have an effect on historic properties if it changes the characteristics that qualify a historic property for the NRHP. The effect is adverse if it diminishes the integrity of such characteristics.

For the Lookout Pass Ski and Recreation Area expansion project, pre-contact, ethnohistoric, and historical archaeological resources could be directly affected by ground disturbance from project construction, including constructing tower foundations, moving heavy equipment to a construction location to erect a tower or pull cable, trenching for buried utilities, clearing activities (including tree falling and skidding and brushing), and construction related to habitat restoration and access improvements. To determine the effects on archaeological and cultural resources, construction locations and methods were evaluated in context with known or potential archaeological sites.

RESULTS

All of the proposed ski runs, lift tower laydown areas, access roads, utility corridors, new building footprints, and proposed parking expansion areas identified before June 2015 were assessed.

The proposed disturbance area defined before the June 2015 fieldwork encompassed an area measuring approximately 127 acres. In all, approximately 119 acres were surveyed in the proposed disturbance areas identified in the APE (Table 7). The surveyed area included 100 percent of the high and medium ranked landforms and 91 percent of the low ranked landforms (Figure 6). Ground surface visibility was generally very poor (less than 10 percent) in the surveyed areas of the APE and lacked evidence of prior disturbance (i.e., tree throws, animal burrows, bladed road beds, and prospect pits). Shovel probes were excavated within three high probability areas, where ground-disturbing activities are proposed (Figures 7–9).

Table 7. Survey Coverage by Probability Ranking

Forest Unit	Probability Ranking			Total Acres Surveyed
	High (0%–10%)	Medium (10%–30%)	Low (> 30%)	
IPNFs	3.36	24.83	29.06	57.25
LNF	3.48	40.02	18.32	61.82
Total Acres	**6.84**	**64.85**	**47.38**	**119.07**

Note: This probability ranking was derived from the slope of the landform; low slope areas (0%–10%) are assigned the highest probability ranking, whereas high slope areas (> 30%) receive the lowest probability ranking.

SWCA archaeologists identified one previously unrecorded archaeological resource (LP-01/24MN372) and two previously recorded resources (10SE888 and 10SE1189) in the APE in Idaho (Attachment C), and one previously unrecorded archaeological resource (LP-01/24MN372) and two previously recorded resources (24MN120 and 24MN133) in the APE in Montana (Attachment D) (Figure 10). A historic debris scatter (LP-01/24MN372) was identified at the crest of St. Regis Pass on both sides of the state boundary and has been recorded with the respective Idaho and Montana SHPOs. One isolated lithic artifact (IO-01) was identified in a shovel probe excavated at the crest of the ridge in Montana (see Figure 6). Noted but not recorded (NNR) resources identified in the APE include four blazed trees (representing mining claim markers or survey markers), five prospect pits or shafts with associated claim markers, and 70 prospect pits and trenches (Attachment E). These findings are discussed in more detail, below.

Idaho

LP-01/24MN372 (St. Regis Pass Historic Debris Scatter)

CURRENT INVESTIGATIONS

The historic debris scatter (LP-01/24MN372) was identified during the pedestrian survey and shovel testing along the proposed route of the buried power line corridor across the crest of St. Regis Pass on June 10, 2015 (Figure 11).

Redacted from public version.

Figure 6. Archaeological survey and shovel testing areas in the APE

Redacted from public version.

Figure 7. Shovel Probe Area 1 (see Figure 6).

Redacted from public version.

Figure 8. Shovel Probe Area 2 (see Figure 6).

Redacted from public version.

Figure 9. Shovel Probe Area 3 (see Figure 6).

Redacted from public version.

Figure 10. Archaeological and historical resources identified within the APE

Redacted from public version.

Figure 11. LP-01/24MN372 site map.

SITE DESCRIPTION

Site LP-01/24MN372 is a historic artifact debris scatter, including glass bottle fragments and metal can and wire fragments. The site was identified on the Idaho-Montana state line at the crest of St. Regis Pass adjacent to the previously identified and recorded segments of the historic Mullan Road (10SE1189/24MN133). St. Regis Pass is noted in the Idaho SHPO inventory as 79-1232, as a location along the Mullan Road. The temporally diagnostic artifacts were primarily found in three concentrations north of an existing ATV/Jeep trail, and a dispersed scatter of small glass and metal fragments was exposed in the road bed surface. Clear glass fragments similar to those noted in the trail bed in the northern portion of the site was recovered just below the surface in a shovel probe (SP 4) in the southern corner of the site (see Figure 8), and no evidence of historic debris was observed in the open holes mapped in the disturbance area southeast of the site.

Thick, brown glass bottle body fragments, bases, and finishes, representing at least 11 different individual bottles, were identified in two discrete concentrations north of an existing ATV/Jeep trail near SP 3, and similar thick, brown bottle glass fragments were distributed across the surface of the road bed immediately south of these concentrations and downslope to the northwest. A metal ring and square nail were also identified on the road surface, and a flat, rectangular metal can was partially exposed on the surface south of the road bed. A short section of nine-gauge wire was also noted in the ATV/Jeep road bed in the northeast corner of the site area. A third glass scatter, this time containing thin, clear glass bottle fragments, was exposed within the narrow trail bed north of the road, and three pieces of thin, clear bottle glass, similar to those recorded within the trail bed, were identified between 0 and 7 cm below surface (cmbs) in SP 4, south of the ATV/Jeep trail.

Temporally diagnostic historic artifacts recorded during the pedestrian survey in LP-01/24MN372 include maker's marks on the bases of four bottles (Figure 12). Some of these bottles may have been produced as early as the late 1860s or 1870s; however, most of these marks suggest they were likely produced and used from the 1880s through early 1900s (Table 8). These bottles were likely discarded in this area between the 1880s and 1905, when the Mullan Road was used as a travel and supply route between Idaho and Montana and as a route for local miners prospecting in the mountains and local river valleys.

Table 8. Bottle Maker's Marks and Associated Production Dates from LP-01/24MN372

Maker's Mark	Company	Production Dates	Contents	Reference
F. H. G. W.	Frederick Hampton Glass Works, England	ca. 1880–1900	Beer	Toulouse (1971):202–203
R & CO*	Roth & Videane	1868–1876	Whiskey, liquor, or beer	Toulouse (1971):438–439
	Roth & Luy	1876–1879		
	Roth & Co.	1879–1888		
	Unknown	1880–1900		
S.B. & G. CO.	Streator Bottle & Glass Co., Illinois	1881–1905	Unknown	Toulouse (1971): 461–463
WIS GLASS Co	Wisconsin Glass Co., Wisconsin	1882–1886	Unknown	Toulouse (1971):541–542

* This production mark was used by at least three different companies in the San Francisco area from 1868 through 1900. Roth & Co. marketed a popular brand of whiskeys and liquors in the 1880s; however, the mark was also placed on export beer bottles produced between 1880 and 1900. Because the original bottle shape (and contents) could not be specifically determined, the companies and their associated dates are listed in chronological order of production dates (Toulouse 1971:438–439).

Figure 12. Maker's marks identified on bottle bases recorded in LP-01/24MN372.

EVALUATION OF SIGNIFICANCE

Integrity

Evidence of disturbance within the boundaries of the historic debris scatter includes road construction, natural processes of slope wash, recreational use, and possibly the selective removal of the small trees for transplanting. The distribution of thick, dark brown bottle glass fragments, similar to those observed in the bottle fragment concentrations north of the ATV/Jeep road bed, suggests that construction of the road through this area previously disturbed the debris scatter. The distribution of the thick, dark brown bottle glass along the road surface also suggests that surface wash from melting snow or heavy rains is moving glass and possibly other artifacts downslope along the roadway to the northwest. In addition, evidence of modern use, including camping and the selective digging of young trees for transplanting, was noted during the survey in and adjacent to the defined site area. Recent fire rings, partially burned logs, fire-modified sediments, and modern trash (including plastic and metal fragments, and melted glass) were observed in the ATV/Jeep road bed.

The area south of the ATV/Jeep road contains numerous small coniferous trees, each less than 4–5 feet high, and at least 12 rounded holes, each measuring from approximately 50 to 75 cm in diameter and 20–30 cm deep, were recorded south of the site (see Figure 11). The vegetation on either side of the holes is intact, and there was no evidence of adjacent spoil piles, suggesting that the sediments were removed along with the root mass of the young trees. No evidence of historic debris associated with LP-01/24MN372 was noted in or adjacent to the holes; however, the thick surface vegetation covering most of the site area north and south of the road bed likely obscures additional historic debris on or immediately below the ground surface. The presence of discrete artifact clusters and evidence of subsurface artifacts suggest that this site retains integrity of location and materials.

NRHP Eligibility

This property is recommended eligible for the NRHP under Criteria A and D because it is associated with significant events in history (operation of the Mullan Road during the late 1800s and early 1900s), and is likely to yield important new or additional information about the history and use of the area. The site, however, is not associated with the lives of persons significant in our past and does not embody a distinctive architectural style (Criteria B and C).

POTENTIAL EFFECTS

It is unlikely that the installation of a buried power cable within the existing ATV/Jeep road will affect the historic debris scatter at LP-01/24MN372.

10SE888 (Northern Pacific Railroad Bed)

The segment of the Northern Pacific Railroad Bed in the APE was previously recorded in Idaho and assigned the Smithsonian Trinomial 10SE888 and IHSI number 79-18063. Other segments of the site were recorded as 10SE1157, 10KA358, and 10BW146 (Grieser and Hagen 2000).

CURRENT INVESTIGATIONS

On June 12, 2015, SWCA archaeologists conducted a pedestrian survey and recorded a segment of the Northern Pacific Railroad Bed (10SE888) within the APE in Idaho, north of Lookout Pass (Figure 13). Cross-section profiles were drawn at three locations to characterize the current condition of the grade bed and of cut and fill slopes in the proposed disturbance area.

Redacted from public version.

Figure 13. Site map for 10SE888.

SITE DESCRIPTION

The Northern Pacific Railroad Bed is identifiable for over 700 feet in the APE, and the road bed ranges from 13 to 21 feet wide. Artifacts identified along the shoulder of the grade in the site area include several pieces of clear glass bottle fragments, a piece of milled timber, a rail bracket and tie spikes, a short section of iron pipe, a metal barrel lid, and a concave metal disc. This section of the rail line was built between 1890 and 1891 (Holstine 1982), and deconstructed and abandoned in 1980. No temporally diagnostic artifacts were identified in association with the section of the grade recorded in the APE in Idaho. Following its abandonment, the railroad bed was graded and widened to support car and truck use. Historic artifacts and other materials identified along the shoulders of the current railroad bed do not exhibit temporally diagnostic features or maker's marks and do not provide any additional information regarding the use of the rail line in this area.

EVALUATION OF SIGNIFICANCE

Integrity

The railroad bed has been significantly altered by the removal of the rails and ties and by its conversion to, and use as, a dirt access road and parking area for the Lookout Pass Ski and Recreation Area. The Northern Pacific Railroad Bed does not retain integrity of materials, workmanship, feeling, and association.

NRHP Eligibility

Although this property is associated with significant events in history (specifically the western expansion of the railroad system), it is not associated with the lives of persons significant in our past, does not embody a distinctive architectural style, and is unlikely to yield new or additional information pertaining to the history of the area. This segment of the site does not contribute to the eligibility of the larger eligible site, nor is it recommended individually eligible for the NRHP under Criteria A, B, C and D.

POTENTIAL EFFECTS

No effects are expected from proposed expansion of the existing parking area.

10SE1189 (the Mullan Road)

The Mullan Road at St. Regis Pass was previously recorded in Idaho and assigned the Smithsonian Trinomial 10SE1189 (Ritchie 1991h) and the ISHI number 79-001232. Three segments of the Mullan Road (the Heyburn State Park Segment, Alder Creek/Cedar Creek Segment, and Fourth of July Pass Segment) were nominated for the NRHP (Sims 1989), and the property was entered in the NRHP in 1990.

CURRENT INVESTIGATIONS

On June 15, 2015, SWCA archaeologists conducted a pedestrian survey of the Mullan Road, recorded the route using the high-precision GPS, and documented the characteristics of the wagon road bed in and adjacent to the proposed ground disturbance areas in the APE between St. Regis Pass and the St. Regis River (Figures 14–17). Cross-section profiles were drawn at seven locations along the route to characterize the current condition of the road bed at proposed ground disturbance areas identified on project maps available during fieldwork. All mineral soil exposures (i.e., cleared ATV/Jeep road beds, tree throws, and other natural vegetation clearings) within 15 m on the east and west sides of the road bed were inspected.

Redacted from public version.

Figure 14. The Mullan Road (10SE1189) site area overview.

Redacted from public version.

Figure 15. The Mullan Road (10SE1189) site area (map 1 of 3).

Redacted from public version.

Figure 16. The Mullan Road (24MN133) site area (map 2 of 3).

Redacted from public version.

Figure 17. The Mullan Road in Montana (24MN133) site area (map 3 of 3).

SITE DESCRIPTION

The tread of the Mullan Road ranges in width from 5 to 8 feet, and the tread surface is typically approximately 6 inches below the surrounding grade (Figure 18). Parallel wagon treads are visible in some portions of the road (see Figure 14, Cross Section 4), and low berms, typically less than 4–6 inches high and up to 4 feet wide were noted intermittently on both sides of the main tread. From the crest of St. Regis (Sohon) Pass, where it is crossed by an ATV/Jeep trail, the Mullan Road parallels the course of another ATV/Jeep trail for over 980 feet before the route descends into the South Fork Coeur d'Alene River Valley. With the exception of those recorded at LP-01/24MN372 (historic debris scatter), no artifacts were identified in or adjacent to the Mullan Road bed.

The Mullan Road was built over St. Regis Pass in the fall of 1859. The Mullan Road was in use during the period following its completion in 1860 through the early 1900s. The numerous seeps and springs located along the north side of the pass and the flanks of Runt Mountain washed out sections of the road along the sloping grade and may have necessitated improvements (i.e., rerouting and ditching) during the 1861 and 1862 construction seasons to divert water off of the road bed (James Cyr, personal communication, 2015).

Figure 18. Overview of the Mullan Road tread at Cross Section 1, view to the northwest.

EVALUATION OF SIGNIFICANCE

Integrity

The segments of the Mullan Road recorded in and adjacent to the location of proposed ground-disturbing activities are some of the longest and most intact segments of the historic route. Although the Mullan Road has already been crossed in three locations in the APE on the Montana side of St. Regis Pass, the

remaining, intact segments of the Mullan Road bed are similar in length and character to the segments that are already NRHP-listed. These segments of the Mullan Road retain integrity of materials, workmanship, feeling, and association.

NRHP Eligibility

This property is recommended eligible for the NRHP under Criteria A and B, because it is associated with Captain John Mullan who played an important role in the development of transportation in Idaho, Montana, and Washington as a surveyor for the first transcontinental railroad across these states and as the leader for construction of the Mullan Road. At this time, this segment of the Mullan Road does not, however, embody a distinctive architectural style (Criterion C), nor does it contain intact archaeological deposits that are likely to add important information about local or regional history (Criterion D).

POTENTIAL EFFECTS

No adverse effects to this site are anticipated from the proposed project within Idaho. The proposed trenching and installation of a buried power line within the existing ATV/Jeep trail bed that crosses the Mullan Road at St. Regis Pass are unlikely to affect the Mullan Road segments on the Idaho or Montana sides of the border.

Montana

LP-01/24MN372 (St. Regis Pass Historic Debris Scatter)

CURRENT INVESTIGATIONS

The historic debris scatter (LP-01/24MN372) was identified during the pedestrian survey and shovel testing along the proposed route of the buried power line corridor across the crest of St. Regis Pass on June 10, 2015 (Figure 19). This is the same site described under the Idaho header, but is re-described below for ease of review by different state agencies.

SITE DESCRIPTION

Site LP-01/24MN372 is a historic artifact debris scatter, including glass bottle fragments and metal can and wire fragments. The site is on the Idaho-Montana state line at the crest of St. Regis Pass adjacent to the previously identified and recorded segments of the historic Mullan Road (10SE1189/24MN133). The temporally diagnostic artifacts were primarily found in three concentrations north of an existing ATV/Jeep trail, and a dispersed scatter of small glass and metal fragments was exposed in the road bed surface. Clear glass fragments similar to those noted in the trail bed in the northern portion of the site were recovered just below the surface in a shovel probe (SP 4) in the southern corner of the site (see Figure 19), and no evidence of historic debris was observed in the open holes mapped in the disturbance area southeast of the site.

Redacted from public version.

Figure 19. LP-01/24MN372 site map.

Thick, brown glass bottle body fragments, bases, and finishes, representing at least 11 different individual bottles, were located in two discrete concentrations north of an existing ATV/Jeep trail near SP 3, and similar thick, brown bottle glass fragments were distributed across the surface of the road bed immediately south of these concentrations and downslope to the northwest. A metal ring and square nail were also identified on the road surface, and a flat, rectangular metal can was partially exposed on the surface south of the road bed. A short section of nine-gauge wire was also noted in the ATV/Jeep road bed in the northeast corner of the site area. A third glass scatter, this time containing thin, clear glass bottle fragments, was exposed within the narrow trail bed north of the road, and three pieces of thin, clear bottle glass, similar to those recorded within the trail bed, were identified between 0 and 7 cmbs in SP 4, south of the ATV/Jeep trail

Temporally diagnostic historic artifacts recorded during the pedestrian survey in LP-01/24MN372 include maker's marks on the bases of four bottles (Figure 20). Some of these bottles may have been produced as early as the late 1860s or 1870s; however, most of the marks suggest they were most likely produced and used in the 1880s through early 1900s (Table 9). These bottles were likely discarded in this area between the 1880s and 1905, when the Mullan Road was used as a travel and supply route between Idaho and Montana and as a route for local miners prospecting in the mountains and local river valleys.

Table 9. Bottle Maker's Marks and Associated Production Dates from LP-01/24MN372

Maker's Mark	Company	Production Dates	Contents	Reference
F. H. G. W.	Frederick Hampton Glass Works, England	ca. 1880–1900	Beer	Toulouse (1971):202–203
R & CO*	Roth & Videane	1868–1876	Whiskey, liquor or beer	Toulouse (1971):438–439
	Roth & Luy	1876–1879		
	Roth & Co.	1879–1888		
	Unknown	1880–1900		
S.B. & G. CO.	Streator Bottle & Glass Co., Illinois	1881–1905	–	Toulouse (1971): 461–463
WIS GLASS Co	Wisconsin Glass Co., Wisconsin	1882–1886	–	Toulouse (1971):541–542

* This production mark was used by at least three different companies in the San Francisco area from 1868 through 1900. Roth & Co. marketed a popular brand of whiskeys and liquors in the 1880s; however, the mark was also placed on export beer bottles produced between 1880 and 1900. Because the original bottle shape (and contents) could not be specifically determined, the companies and their associated dates are listed in chronological order of production dates (Toulouse 1971:438–439).

EVALUATION OF SIGNIFICANCE

Integrity

Evidence of disturbance within the boundaries of the historic debris scatter include road construction, natural processes of slope wash, recreational use, and the selective removal of the small trees for transplanting. The distribution of thick, dark brown bottle glass fragments, similar to those observed in the concentrations north of the ATV/Jeep road bed, suggests that construction of the road through this area previously disturbed the debris scatter. The distribution of thick, dark brown bottle glass along the road surface also suggests that surface wash from melting snow or heavy rains is moving glass and possibly other artifacts downslope along the roadway to the northwest. In addition, evidence of modern use, including camping and the selective digging of young trees for transplanting, was noted during the survey in and adjacent to the defined site area. Recent fire rings, partially burned logs, fire-modified sediments, and modern trash (including plastic and metal fragments, and melted glass) were observed in the ATV/Jeep road bed.

Figure 20. Maker's marks identified on bottle bases recorded in LP-01/24MN372.

The area south of the ATV/Jeep road contains numerous small coniferous trees, each less than 4–5 feet high, and at least 12 rounded holes, each measuring from approximately 50 to 75 cm in diameter and 20–30 cm deep, were recorded south of the site (Figure 21). The vegetation on either side of the holes is intact, and there was no evidence of adjacent spoil piles, suggesting that the sediments were removed along with the root mass of the young trees. No evidence of historic debris associated with LP-01/24MN372 was noted in or adjacent to the holes; however, the thick surface vegetation covering most of the site area north and south of the road bed likely obscures additional historic debris on or immediately below the ground surface. The presence of discrete artifact clusters and evidence of subsurface artifacts suggest that this site retains integrity of location and materials.

NRHP Eligibility

This property is recommended eligible for the NRHP under Criteria A and D, because it is associated with significant events in history (operation of the Mullan Road during the late 1800s and early 1900s), and is likely to yield important new or additional information about the history and use of the area. The site, however, is not associated with the lives of persons significant in our past and does not embody a distinctive architectural style (Criteria B and C).

POTENTIAL EFFECTS

It is unlikely that the installation of a buried power cable within the existing ATV/Jeep road will affect the historic debris scatter at LP-01/24MN372.

Figure 21. Open hole left by the excavation and removal of a sapling root mass, view to north.

24MN120 (Northern Pacific Railroad Segment)

The segment of the Northern Pacific Railroad Bed located in the APE was previously recorded by the LNF and found not eligible for the NRHP (Matthew 1985; McLeod 1985). Other segments of the same rail line in Montana are considered eligible. This site was assigned Smithsonian Trinomial 24MN120 (Lindeman et al. 1984).

CURRENT INVESTIGATIONS

On June 12, 2015, SWCA archaeologists conducted a pedestrian survey and recorded the portion of the Northern Pacific Railroad Bed (24MN120) located in the APE in Montana, south of Lookout Pass (Figure 22). Cross-section profiles were drawn at three locations to characterize the current condition of the grade bed and of the cut and fill slopes in the proposed area of ground disturbance.

SITE DESCRIPTION

The Northern Pacific Railroad Bed is identifiable for over 550 feet in the APE, and the road bed ranges from 15.0 to 16.5 feet wide. Artifacts identified along the edges of the grade in the site area include a rail bracket and tie spikes, a utility pole with a green glass insulator (marked with the date: OCT 8 1907), a ceramic insulator fragment, and a possible rail section that is partially buried in the downslope fill (see Figure 22).

This section of the rail line was built between 1890 and 1891 and deconstructed and abandoned in 1980. Following abandonment, the railroad bed was graded and widened to support car and truck use. Aside from the green glass insulator, the historic artifacts and other materials identified along the shoulders of the current road bed do not exhibit temporally diagnostic features or maker's marks and do not provide any additional information regarding the use of the rail line in this area.

EVALUATION OF SIGNIFICANCE

Integrity

The railroad bed has been significantly altered by the removal of the rails and ties and by its conversion to, and use as, a dirt access road. The Northern Pacific Railroad Bed does not retain integrity of materials, workmanship, feeling, and association.

NRHP Eligibility

Although this property is associated with significant events in history (specifically the western expansion of the railroad system), it is not associated with the lives of persons significant in our past, does not embody a distinctive architectural style, and is unlikely to yield new or additional information pertaining to the history of the area. This segment of the rail line does not contribute to the NRHP eligibility of the larger eligible site, nor is it recommended individually eligible for the NRHP under Criteria A, B, C and D.

POTENTIAL EFFECTS

No adverse effect to this site is expected from proposed expansion of the existing road bed through grading to expand the existing parking area to the south.

Redacted from public version.

Figure 22. Northern Pacific Railroad Segment (24MN120) site map.

24MN133-G (the Mullan Road, St. Regis [Sohon] Pass to St. Regis River segment)

The segment of the Mullan Road in the APE is the first of six segments most recently recorded and described by Ben Munger (1985).

CURRENT INVESTIGATIONS

On June 15, 2015, SWCA archaeologists conducted a pedestrian survey of the Mullan Road, recorded the route using the high-precision GPS, and documented the characteristics of the wagon road bed in and adjacent to the proposed ground disturbance areas in the APE between St. Regis Pass and the St. Regis River (Figure 23). Cross-section profiles were drawn at seven locations along the route to characterize the current condition of the road bed at proposed ground disturbance areas identified on project maps available during fieldwork. All mineral soil exposures (i.e., cleared ATV/Jeep road beds, tree throws, and other natural vegetation clearings) within 15 m on the east and west sides of the road bed were inspected.

SITE DESCRIPTION

The Mullan Road was built over St. Regis (Sohon) Pass in the fall of 1859. The Mullan Road was in use during the period following its completion in 1860 through the early 1900s. The tread of the Mullan Road ranges in width from 5 to 8 feet, and the tread surface is typically approximately 6 inches below the surrounding grade. Parallel wagon treads are visible in some portions of the road (see Figure 23, Cross Section 4), and low berms, typically less than 4–6 inches high and up to 4 feet wide were noted intermittently on both sides of the main tread. Volunteer foresters visited the project during the 2015 survey and collected tree ring cores from multiple large, mature standing trees along the Mullan Road on either side of St. Regis Pass. These foresters identified one very large tree along the Mullan Road route between the locations of Cross Sections 3 and 4 that was older than 200 years (see Figure 23). This tree was present during the construction and use of the Mullan Road, and it survived the 1910 fire that killed most of the other large, mature trees in this region. With the exception of those recorded at LP-01/24MN372, no artifacts were identified in or adjacent to the Mullan Road bed.

From the crest of St. Regis Pass, where it is crossed by an ATV/Jeep trail, the tread of the Mullan Road is visible on the ground surface for nearly 3,000 feet before it intersects the St. Regis River. Along its length, this portion of the Mullan Road is crossed by ATV/Jeep trails at three locations; the first is approximately 600 feet southwest of the Idaho-Montana border at St. Regis Pass, the second is approximately 830 feet from the border, and the third is approximately 2,900 feet from southeast of the pass where it is crossed by the ATV/Jeep trail that parallels the southern boundary of the APE.

EVALUATION OF SIGNIFICANCE

Integrity

The segments of the Mullan Road recorded in and adjacent to the location of proposed ground-disturbing activities are some of the longest and most intact segments of the historic route. Although the Mullan Road has already been crossed in three locations in the APE on the Montana side of St. Regis Pass, the remaining, intact segments of the roadbed are similar in length and character to the segments that are already NRHP-listed. These segments of the Mullan Road retain integrity of materials, workmanship, feeling, and association.

Redacted from public version.

Figure 23. The Mullan Road (24MN133-G) site area overview.

NRHP Eligibility

This property is recommended eligible for the NRHP under Criteria A and B, because it is associated with Captain John Mullan who played an important role in the development of transportation in Idaho, Montana, and Washington as a surveyor for the first transcontinental railroad across these states and as the leader for construction of the Mullan Road. At this time, this segment of the Mullan Road does not, however, embody a distinctive architectural style (Criterion C), nor does it contain intact archaeological deposits that are likely to add important information about local or regional history (Criterion D).

Potential Effects

Clearing of trees from the Mullan Road route and from areas visible from the road would adversely affect the feeling, workmanship, and character of the road. Ground disturbance produced by falling or skidding trees across the road, widening of existing ATV/Jeep trails, and new road construction would pose a direct adverse effect to the characteristics and integrity of the Mullan Road.

Isolated Artifacts

IO-01 (LITHIC DEBITAGE)

A fine-grain volcanic secondary flake was recovered approximately 20 cmbs in SP 24, excavated in a level area near the crest of a ridge west of St. Regis Pass (Figure 24). No additional pieces of lithic debitage were identified in shovel probes placed at 5- and 10-m intervals around SP 24. The artifact was not collected, but was placed in a plastic bag and buried during the backfilling of the excavated shovel probe.

Resources Noted but Not Recorded

State Line Survey Boundary Markers

Three types of state line survey boundary markers were observed during the survey: 1) modern, stamped capped-pipe survey datum markers were observed at two locations in the western portion of the property; 2) a rock cairn and pipe datum were located adjacent to a more modern stamped-cap datum; and 3) two blazed trees were observed on the flanks of Runt Mountain east of St. Regis Pass. The positions of these markers were documented in the field using GPS. The markers were photographed but not formally recorded with the Idaho or Montana SHPOs. During the Idaho-Montana Boundary Survey (1904–1905), the survey used brass caps with raised letters with MONT on the east side and IDA on the west with a raised X in the center (Krueger 1964:5–7). In his notes, the surveyor also describes excavating pits in cardinal directions around his markers and building a mound of earth to further highlight the position. The rock cairn and pipe datum may represent the earliest of these boundary survey markers.

Mining Prospect Pits and Claim Markers

In all, four blazed trees, five prospect pits with associated claim trees (i.e., marked with one or more blazes and a tobacco can), 64 prospect pits, and six trenches were observed in or immediately adjacent to the proposed disturbance area (see Attachment E).

Redacted from public version.

Figure 24. Location of IO-01 and adjacent shovel test probes.

ASSESSMENT OF EFFECTS

In 2015, SWCA surveyed all proposed disturbance areas in the Lookout Pass Ski and Recreation Area APE. During this survey, SWCA revisited four previously recorded sites and identified two previously unrecorded pre-contact and historic archaeological resources (Tables 10 and 11). Together, these archaeological properties contain one pre-contact component and one historic period component.

One historic resource is recommended eligible for the NRHP. Chronological information could not be obtained from the pre-contact resource, and extensive subsurface testing around the discovery site did not identify any additional evidence of pre-contact Native American activity at this location. The LP-01/24MN372 and Mullan Road (10SE1189/24MN133-G) historic resource relates to the period of exploration, transportation, and mining from the mid-1800s through early 1900s. No pre-contact resources were recommended eligible for NRHP-listing, and among the three historic resources recommended eligible or listed on the NRHP, the Mullan Road is the only known resource that is expected to be adversely affected by proposed timber clearing and ground-disturbing activities involved in road or lift construction and operation.

A summary of survey findings, eligibility, and adverse effects recommendations and mitigation suggestions are presented separately for Idaho and Montana below.

Idaho

Table 10. Idaho NRHP Eligibility Summary

Site Number	Description	Component	Age	Integrity	NRHP Eligibility	Criterion	Adverse Effect
LP-01/24MN372	St. Regis Pass Historic debris scatter	Historic	ca. 1870–1905	Yes	Recommended eligible	A, D	No
10SE888	Northern Pacific Railroad bed	Historic	ca. 1891–1980	No	Not eligible	–	–
10SE1189	The Mullan Road	Historic	1850s–early 1900s	Yes	Eligible	A, B	Yes (direct effect on Montana side)

Montana

Table 11. Montana NRHP Eligibility Summary

Site Number	Description	Component	Age	Integrity	NRHP Eligibility	Criterion	Adverse Effect
LP-01/24MN372	St. Regis Pass Historic debris scatter	Historic	ca. 1870–1905	Yes	Recommended eligible	A, D	No
IO-01	Lithic Isolate	Pre-contact	Pre-contact	Yes	Recommended not eligible	–	–
24MN120	Northern Pacific Railroad bed	Historic	ca. 1891–1980	No	Not eligible	–	–
24MN133-G	The Mullan Road	Historic	1850s–early 1900s	Yes	Eligible	A, B	Yes

Mitigation

The Forest Service is currently developing a Memorandum of Agreement with the Montana SHPO which will include mitigation measures to address adverse effects to the Mullan Road. These mitigation measures, when finalized, will be implemented in addition to prior minimization efforts that involved re-routing a proposed ski trail and temporary access roads to reduce the amount of direct impact to the Mullan Road.

REFERENCES CITED

Adams, Glen (editor)

1999 *The Coeur d'Alene Indian Reservation*. Ye Galleon Press, Fairfield, Washington.

Alt, David D., and Donald W. Hyndman

1989 *Roadside Geology of Idaho*. Mountain Press Publishing Company, Missoula, Montana.

Avista Power Company

2014 Redundant loop for emergency power feed. E-mail correspondence between Robin Bekkedahl, Senior Environmental/Cultural Scientist for Avista, and Susan Wilmot, SWCA Environmental Consultants, June 4, 2014.

Bacon, Sydney

2010a Cultural Site Record Update, 45MN150, Leslie Adit. On file with the Montana State Historic Preservation Officer, Helena, Montana.

2010b Cultural Site Record, 45MN151, Cooper (Sildex) Lake Dam. On file with the Montana State Historic Preservation Officer, Helena, Montana.

Bemis, Samuel F.

1923 Captain John Mullan and the Engineers' Frontier. *The Washington Historical Quarterly* 14(3):201–205.

Bennett, Earl H., Peter L. Siems, and James T. Constantopoulos

1989 The Geology and History of the Coeur d'Alene Mining District, Idaho. In *Guidebook to the Geology of Northern and Western Idaho and Surrounding Area*, edited by V.E. Chamberlain, R.M. Breckenridge, and B. Bonnichsen, pp. 137–156. Idaho Geological Survey Bulletin No. 29. University of Idaho, Moscow, Idaho.

Bolton, Joy, and Ann Hubber

1990 National Register of Historic Places Registration Form, Shoshone Park Picnic Area, 10SE749. On file with the Idaho State Historic Preservation Officer, Boise, Idaho.

Boreson, Keo

1988 *A CRS of the Bonneville Power Administration's Taft-Bell Transmission Line Project, Western Montana to Northeastern Washington*. Report prepared for BPA by Archaeological and Historical Services, Cheney, Washington.

Chamberlain, V.E., Roy M. Breckenridge, and Bill Bonnichsen

1989 *Guidebook to the Geology of Northern and Western Idaho and Surrounding Areas*. Idaho Geological Survey Bulletin No. 29. University of Idaho, Moscow, Idaho.

Chatters, James C.

1998 Environment. In *Handbook of North American Indians Volume 12: Plateau*, edited by D. Walker, pp. 29–48. Smithsonian Institution, Washington, D.C.

2000 Archaeological and Historical Survey Report for the American Tower Corporation Wireless Facility Larson #43407, Shoshone County, Idaho. Report prepared for American Tower Corporation, Seattle, Washington.

Clague, J.J.

1980 *Late Quaternary Geology and Geochronology of British Columbia—Part 1, Radiocarbon Dates*. Geological Survey of Canada Paper 80-13.

1981 *Late Quaternary Geology and Geochronology of British Columbia—Part 2, Summary and Discussion of Radiocarbon-dated Quaternary History*. Geological Survey of Canada Paper 80-35.

Cohen, Stan

2007 *Downhill in Montana*. Pictorial Histories Publishing Company, Inc., Missoula, Montana.

Dahlgren, Dorothy, and Simone Carbonneau-Kincaid

1996 *In All the West No Place Like This: A Pictorial History of the Coeur d'Alene Region*. Museum of North Idaho, Coeur d'Alene, Idaho.

Edholm, Phil

2013 Personal communication with Scott Weber of Avista Power Company regarding power line capacity and location.

Ferguson, David

2000 *Archaeological Investigations at the Janssen Site (24PR1599), Power River County, Montana*. Prepared for the Montana Department of Transportation, Helena, Montana, by GCM Services, Inc.

Frison, George C.

1978 *Prehistoric Hunters of the High Plains*. Academic Press, New York.

1991 *Prehistoric Hunters of the High Plains*, 2nd ed. Academic Press, New York.

Frison, George C., David Schwab, L. Adrien Hannus, Peter Winham, David Walter, and Robert C. Mainfort

1996 Archaeology of the Northwestern Plains. In *Central and Northern Plains Archaeological Overview Series - Archaeological and Bioarchaeological Resources of the Northern Plains*, edited by G.C. Frison and R.C. Mainfort, pp. 8–40. Arkansas Archaeological Survey Research Series No. 47. U.S. Department of Defense and U.S. Army Corps of Engineers.

Greenough, W. Earl

1947 *First 100 Years: Coeur d'Alene Mining Region, 1846-1946*. W. Earl Greenough, Mullan, Idaho.

Greiser, Sally T.

1984 Projectile Point Chronologies of Southwestern Montana. *Archaeology in Montana* 25(1):35–51.

1994 Late Prehistoric Cultures on the Montana Plains. In *Plains Indians, A. D. 500-1500: The Archaeological Past of Historic Groups*, edited by K.H. Schlesia, pp. 34–55. University of Oklahoma Press, Norman, Oklahoma.

Greiser, Sally T., T. Weber Greiser, and Susan M. Vetter

1985 Middle Prehistoric Period Adaptations and Paleoenvironment in the Northwestern Plains: The Sun Rive Site. *American Antiquity* 50(4):849–877.

Greiser, T.W.

2002 *Addendum to: Results of a CRI for the Touch America/AT&T Fiber Optic Cable Route along Interstate 90 in Idaho*. Prepared for Power Engineers, Inc., Hailey, Idaho, by Historical Research Associates, Inc., Missoula, Montana.

Greiser, T.W., and D. Hagen

2000 *Results of a Cultural Resources Inventory for the Touch America/AT&T Fiber Optic Cable Route along Interstate-90 in Idaho*. Prepared for Power Engineers, Hailey, Idaho, by HRA, Missoula, Montana.

Greiser, T.W., Matt Thomas, Delia Hagen, and Derek Beery

2000 *Results of a Cultural Resources Inventory for the Touch America/AT&T Fiber Optic Cable Route between Billings and Lookout Pass in Montana*. Prepared for Power Engineers, Inc. Hailey, Idaho, by HRA, Missoula, Montana.

Harrison, J.E., A.B. Griggs, A.B., and J.D. Wells

1974 *Tectonic Features of the Precambrian Belt Basin and Their Influence on Post Belt Structures*. U.S. Geological Survey Professional Paper 86. U.S. Government Printing Office, Washington, D.C.

1986 Geologic and Structure Maps of the Wallace 1° x 2° Quadrangle, Montana and Idaho. Atlas 4-A. Scale 1:250,000. Montana Bureau of Mines and Geology, Butte, Montana.

Hill, M.

2005 *Central Zone Physical Safety Hazard Removal*. Idaho Panhandle National Forest, Coeur d'Alene, Idaho.

Holstine, Craig

1982 Cultural Site Record, 24MN120, Northern Pacific Railroad Grade at Taft. On file with the Montana State Historic Preservation Officer, Helena, Montana.

1986 *CRS of Eleven Fly Yards and Three Gravel Quarry Sites on the Bonneville Power Administration's Taft-Bell 500 KV Transmission Line Project, North Idaho*. Report prepared for Bonneville Power Administration by Archaeological and Historical Services, Eastern Washington University, Cheney, Washington.

Idaho Panhandle National Forests

2007 *Idaho Panhandle National Forest Heritage Guidelines, Site Investigation Strategy*. U.S. Department of Agriculture Forest Service, Idaho Panhandle National Forest's Supervisors Office, Coeur d'Alene, Idaho.

Jones, Bill

1986 *CRI of the Hecla Mining Company Exchange, Wallace Ranger District, Idaho Panhandle National Forest*. Report No. 86-IP-I-27. Report prepared by Idaho Panhandle National Forest, Coeur d'Alene, Idaho.

Kennedy, Hal Kirk

1976 An Examination of the Tucannon Phase as a Concept: Step One. Unpublished Master's Thesis. University of Idaho, Moscow, Idaho.

Knight, George C.

1989 *Overview: Ecological and Cultural Prehistory of the Helena and Deerlodge National Forests, Montana*. U.S. Department of Agriculture Forest Service, Helena National Forest, Helena, Montana.

Krueger, Carl. G.

1964 *Route of the Mullan Road over the Bitterroot Divide*. Coeur d'Alene National Forest, Coeur d'Alene, Idaho.

Leonhardy, Frank C., and David G. Rice

1970 Proposed Culture Typology for the Lower Snake River Region, Southeast Washington. *Northwest Anthropological Research Notes* 4(1):1–65.

Lindeman, Glen W., Craig Holstine, Ruth Anne Masten, and Glenn D. Hartmann

1984 *A Cultural Resources Survey of the Bonneville Power Administration's Garrison-Taft 500-kV Transmission Line Project*. Archaeological and Historical Services, Eastern Washington University, Cheney, Washington.

Lonn, Jeffrey D. and Mark D. McFaddan

1999 Geologic Map of the Montana Part of the Wallace 30' x 60' Quadrangle. Open File Report MBMG 388. Partial support by STATEMAP, National Cooperative Geologic Mapping Program, U.S. Geological Survey. Montana Bureau of Mines and Geology, Butte, Montana.

Mattson, Daniel M., Ruthann Knudson, Robert Lee Sappington, and Michael A. Pfeiffer

1983 *Cultural Resources Investigations of the Dworshak Reservoir Project, North Fork Clearwater River, Northern Idaho*. University of Idaho Anthropological Research Manuscript Series No. 74. University of Idaho, Moscow, Idaho.

Matthew, Kirby

1985 *Addendum to 45MN120 Coeur d'Alene Branch of the Northern Pacific – Copper Gulch (Sildex Mine) to Montana-Idaho State Line at Lookout Pass*. On file with the Montana State Historic Preservation Officer, Helena, Montana.

Matthew, Kirby, and C. Milo McLeod

1983a *St. Regis Basin Small Sale Proposed Cross Country Ski Route*. Lolo National Forest, Superior Ranger District.

1983b Cultural Site Record, 45MN137, Sildex Mine. On file with the Montana State Historic Preservation Officer, Helena, Montana.

1984a *Copper Gulch Mining Exploration*. Lolo National Forest, Superior Ranger District.

1984b *St. Regis Basin Drill Tests*. Lolo National Forest, Superior Ranger District.

Matthew, K., and B. Munger

1984a Cultural Site Record, 45MN150, Leslie Adit. On file with the Montana State Historic Preservation Officer, Helena, Montana.

1984b Cultural Site Record, 45MN151, Cooper (Sildex) Lake Dam. On file with the Montana State Historic Preservation Officer. Helena, Montana.

Mattson, Daniel M., Ruthann Knudson, Robert Lee Sappington, and Michael A. Pfeiffer

1983 *Cultural Resources Investigations of the Dworshak Reservoir Project, North Fork Clearwater River, Northern Idaho*. University of Idaho Anthropological Research Manuscript Series No. 74. University of Idaho, Moscow, Idaho.

Matz, S.

2009 *Shoshone Cabin Well*. Idaho Panhandle National Forest, Coeur d'Alene, Idaho.

McLeod, C. Milo

1985 *Ski Area Salvage Timber Sale Area*. Lolo National Forest, Superior Ranger District.

McLeod, C. Milo, and Douglas Melton

1986 *The Prehistory of the Lolo and Bitterroot National Forests: An Overview*. Lolo and Bitterroot National Forests, U.S. Department of Agriculture Forest Service, Northern Region, Missoula.

McLeod, Milo C., Timothy Light and Mary Horstman Williams

2003 *Site Identification Strategy Prepared for Bitterroot, Flathead, and Lolo National Forests*. U.S. Department of Agriculture Forest Service, Northern Region, Montana and Idaho.

Mitcham, T.W.

1952 Indicator Minerals, Coeur d'Alene Silver Belt. *Economic Geology* 47(4):415–450.

Miller, F.L.

1884 Map of the Coeur d'Alene Mines and Vicinity, Idaho Territory. Miller and Williams, Portland, Oregon.

Mineral County Historical Society

2004 *Mineral County History*. Mineral County Historical Society, Superior, Montana.

Mullan, John

1863 *Report on the Construction of a Military Road from Fort Walla Walla to Fort Benton*. Government Printing Office, Washington, D. C. Reprinted in 1994 with an Introduction by Kimberly Rice Brown and Biography of John Mullan by Glen Adams.

Mulloy, William T.

1958 A Preliminary Historical Outline for the Northwestern Plains. *University of Wyoming Publications* 22(1):1–235.

Munger, Ben

1985 Cultural Site Record, 24MN133, Mullan Road Segment (Sohon Pass to Sildex Mine). On file with the Montana State Historic Preservation Officer, Helena, Montana.

1993 *Whitebark Pine: A Prehistoric Food Source at Timberline in the Bitterroot Mountains of Montana*. Thesis, Masters of Arts, Anthropology. University of California, Santa Barbara, California.

1994 *High-Country Archaeology in the Bitterroot Mountains*. Report prepared for the Beaverhead National Forest, Montana.

Palmer, Gary B.

1998 Coeur d'Alene. In *Handbook of North American Indians Volume 12: Plateau*, edited by D.E. Walker, Jr., pp. 313–326. Smithsonian Institution, Washington, D.C.

Palmer, Gary B., Lawrence Nicodemus, and Lavinia Felsman

1987 *Khwi' Khwe Hntmikhw'lumkhw "This is my Land:" A Workbook in Coeur d'Alene Indian Geography*. Coeur d'Alene Tribe, Plummer, Idaho, and Department of Anthropology and Ethnic Studies, University of Nevada, Las Vegas, Nevada.

Peltier, Jerome

1975 *Manners and Customs of the Coeur d'Alene Indians*. Peltier Publications, Spokane, Washington.

Porter, S.C.

1978 Glacier Peak Tephra in the North Cascade Range, Washington: Stratigraphy, Distribution, and Relationship to Late Glacial Events. *Quaternary Research* 10:30–41.

Porter, S.C., and G.H. Denton

1967 Chronology of Neoglaciation in the North American Cordillera. *American Journal of Science* 267:177–210.

Ransome, Frederick L., and Frank C. Calkins

1908 *The Geology and Ore Deposits of the Coeur d'Alene District, Idaho*. U.S. Geological Survey Professional Paper 62. Government Printing Office, Washington, D.C.

Ray, J., Aubrey Morrison, Lorelea Hudson, and Christian Miss

2005 *Avista Transmission Line*. Report prepared for Avista Corp., Spokane, Washington, by NWAA, Seattle, Washington.

Ray, Verne

1936 Native Villages and Groupings of the Columbia Basin. *The Pacific Northwest Quarterly* XXVII: 99–152.

Reininghaus, Lee, Sydney Bacon, and Ed DeCleva

2010 *Summer Trails Environmental Assessment Heritage Program Cultural Resources Analysis*. Lolo National Forest, Superior Ranger District.

Reeves, Brian O.K.

1969 The Southern Alberta Paleo-Cultural - Paleo-Environmental Sequence. In *Post-Pleistocene Man and His Environment on the Northern Plains*, edited by R.G. Forbis, L.B. Davis, O.A. Christensen, and G. Fedirchuk, pp. 6–46. Proceedings of the First Annual Paleo-Environmental Workshop of the University of Calgary Archaeological Association. The Student's Press, Calgary, Canada.

1974 Crowsnest Pass Archaeological Project 1973 Salvage Excavations and Survey. Natural Museum of Man Mercury Series No. 24. Ottawa, Canada.

Rice Brown, Kimberly

1994 Introduction. In Report on the Construction of a Military Road from For Walla-Walla to Fort Benton (reprint). Originally published by John Mullan in 1863.

Ritchie, Carl

1991a Cultural Site Record, 10SE888, Railroad Bed. On file with the Idaho State Historic Preservation Officer, Boise, Idaho.

1991b Cultural Site Record, 10SE1002, Historic Cabin Remnants. On file with the Idaho State Historic Preservation Officer, Boise, Idaho.

1991c Cultural Site Record, 10SE1003, Historic Habitation Remnants. On file with the Idaho State Historic Preservation Officer, Boise, Idaho.

1991d Cultural Site Record, 10SE1004, Historic Cabin Remnants. On file with the Idaho State Historic Preservation Officer, Boise, Idaho.

1991e Cultural Site Record, 10SE1005, Historic Mining Adit (Collapsed). On file with the Idaho State Historic Preservation Officer, Boise, Idaho.

1991f Cultural Site Record, 10SE1007, Historic Mining Camp/Placer Ditch (Remnants). On file with the Idaho State Historic Preservation Officer, Boise, Idaho.

1991g Cultural Site Record, 10SE1008, Historic Timber Extraction Area. On file with the Idaho State Historic Preservation Officer, Boise, Idaho.

1991h Cultural Site Record, 10SE1189, Historic Wagon Road (Mullan's Military Road). On file with the Idaho State Historic Preservation Officer, Boise, Idaho.

1992 *Snowstorm Daisy Timber Sale*. Idaho Panhandle National Forest, Coeur d'Alene, Idaho.

Roll, Tom E., and Steven Hackenberger

1998 Prehistory of the Eastern Plateau. In, *Handbook of North American Indians Volume 12: Plateau*, edited D.W. Walker, Jr., pp. 120–137. Smithsonian Institution, Washington, D. C.

Rumley, Charles

1862 Diary of Charles Rumley from St. Louis to Portland, 1862. Edited by Helen Addison Howard. Manuscript on file at the Mineral County Historical Museum, Superior, Montana.

Sappington, Robert Lee

1988 Archaeological Test Excavation and Evaluation of the Proposed Clearwater Fish Hatchery Site (10-CW-4), on the North Fork of the Clearwater River, North Central Idaho. Contributions by B. Cochran and T.L. Ozbun. University of Idaho Anthropological Reports No. 88. Alfred W. Bowers Laboratory of Anthropology, University of Idaho, Moscow, Idaho.

1994 *The Prehistory of the Clearwater River Region, North Central Idaho*. University of Idaho Anthropological Reports No. 95. Alfred W. Bowers Laboratory of Anthropology, University of Idaho, Moscow, Idaho.

Sears, Jim

1983 A Continental Ramp Margin in the Cordilleran Thrust Belt along the Montana Lineament. Geological Society of America Abstracts with Program (15):682.

Seltice, Joseph

1990 *Saga of the Coeur d'Alene Indians: An Account of Chief Joseph Seltice*. Edited by E.J. Kowrach, and T.E. Connolly. Ye Galleon Press, Fairfield, Washington.

Sims, Cort

1971 Edged Cobbles in the Pacific Northwest. *Tebiwa* 14(2):21–38.

1981 *Hecla Land Exchange (423)*. Idaho Panhandle National Forest, Coeur d'Alene, Idaho.

1986 Cultural Site Record, 10SE790, Lookout Pass Ski Lodge. On file with the Idaho State Historic Preservation Officer, Boise, Idaho.

1987a *Wallace Ranger District Facilities*. Idaho Panhandle National Forest, Coeur d'Alene, Idaho.

1987c Cultural Site Record, 10SE749, Cabin, Garage, and Two Picnic Shelters (Shoshone Park). On file with the Idaho State Historic Preservation Officer, Boise, Idaho.

1987b *Sale of Lookout Ski Lodge*. Idaho Panhandle National Forest, Coeur d'Alene, Idaho.

1989 National Register of Historic Places Registration Form, Mullan Road (Cedar Creek/Alder Creek Segment, Fourth of July Pass Segment, Heyburn State Park Segment). On file with the Idaho State Historic Preservation Officer, Boise, Idaho.

1996a *Clearwater Realty-Upper Priest Lake Land Exchange*. Idaho Panhandle National Forest, Coeur d'Alene, Idaho.

1996b Cultural Site Record, 10SE1154, Mining Claim. On file with the Idaho State Historic Preservation Officer, Boise, Idaho.

Smith, Robert Wayne

1932 History of Placer and Quartz Gold Mining in the Coeur d'Alene District. Master's thesis, University of Idaho, Moscow, Idaho.

Strachan, John

1861 *Blazing the Mullan Road*. Reprinted from the *Rockford Register,* April 1860–April 1861. Housed at the University of Idaho Library, Moscow, Idaho.

Teit, James

1930 The Salishan Tribes of the Western Plateaus. In *Forty-fifth Annual Report of the Bureau of American Ethnology*, edited by F. Boas. Reprinted in 1985 by Ye Galleon Press, Fairfield, Washington.

Teske, A.J., Charles W. Sweetwood, Merle W. Wells, Rolland R. Reid, J.M. Whiting, Joseph Newton, and E.F. Cook

1961 *Idaho's Mineral Industry…the First Hundred Years*. Bulletin No. 18. Idaho Bureau of Mines and Geology, Moscow, Idaho.

Toulouse, J.H.

1971 *Bottle Makers and Their Marks.* Blackburn Press, Caldwell, New Jersey.

Walker, Deward E., Jr.

1978 *Indians of Idaho*. Gem Book. University of Idaho Press, Moscow, Idaho.

Walker, Deward E., Jr., and Roderick Sprague

1998 History until 1846. In *Handbook of North American Indians Volume 12: Plateau*, edited by D. Walker, Jr., pp. 138–148. Smithsonian Institution Press, Washington. D.C.

Wallace, Robert E., and John W. Hosterman

1956 *Reconnaissance Geology of Western Mineral County Montana: A Contribution to Economic Geology*. Geological Survey Bulletin 1027-M. U.S. Government Printing Office, Washington, D.C.

Weisel, Charles

2002 *Soil Survey of St. Joe Area, Parts of Benewah and Shoshone Counties, Idaho*. U.S. Department of Agriculture, National Resources Conservation in cooperation with the United States Department of the Interior Bureau of Land Management, the University of Idaho College of Agriculture, and the Idaho Conservation Commission. Available: http://websoilsurvey.nrcs.usda.gov/app/. Accessed: September 18, 2015.

White, B.G.

1993 Diverse Tectonism in the Coeur d'Alene Mining District, Idaho. In *Belt Symposium III*, edited by R.B. Berg, pp. 254–265. Montana Bureau of Mines and Geology Special Publication 112. Butte, Montana.

Wilson, S.

2009 HECLA Special Use Permit. Idaho Panhandle National Forest, Coeur d'Alene, Idaho.

Winston, D.W.

1986 Middle Proterozoic Tectonics of the Belt Basin, Western Montana and Northern Idaho. In *Belt Supergroup: A Guide to Proterozoic Rocks of Western Montana and Adjacent Areas*, edited by S.M. Roberts, pp. 237–244. Montana Bureau of Mines and Geology Special Publication 94. Butte, Montana.

Winther, Oscar O.

1945 Early Commercial Importance of the Mullan Road. *Oregon Historical Quarterly* 46:21–35.

Wood, John V.

1983 *Railroads through the Coeur d'Alenes*. The Caxton Printers, Ltd., Caldwell, Idaho.

Attachment A

Archaeological Resources Protection Act Permit

Authorization ID: WAL78
Contact ID: ANFHRTG00004
Expiration Date: 12/31/2016

FS-2700-32 (V.07/2012)
OMB No. 0596-0082

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

PERMIT FOR ARCHAEOLOGICAL INVESTIGATIONS

AUTHORITY

The Archaeological Resources Protection Act of 1979, 16 U.S.C. 470aa-mm

The Antiquities Act of 1906, 16 U.S.C. 431-433

The Organic Act of 1897, 16 U.S.C. 551

---

1. Holder SWCA Environmental consultants	**2. Date of corresponding application** 3/25/2015
3. Address 5418 20th Ave NW, Suite 200 Seattle, WA 98107	**4. Telephone numbers** 206-781-1909
	5. Email addresses lhudson@swca.com
6. Name of authorized officer Lorelea Hudson Telephone numbers 206-781-1909 Email addresses lhudson@swca.com	**7. Name of principal investigators** Lorelea Hudson Telephone numbers same Email addresses same
8. Name of field directors authorized to carry out field projects Ross Smith M.A. RPA Michele Parvey, M.A. RPA	**Telephone numbers** 206-781-1909 **Email addresses** rsmith@swca.com mparvey@swca.com
9. Activities authorized	

• Non-ground-disturbing activities (such as surveys)
10. Description of National Forest System lands authorized for use (hereinafter referred to as "the permit area") Lookout Pass Ski Area located approximately 12 miles east of Wallace, Idaho along Interstate 90 on the Idaho-Montana border.
11. Permit term From 04/15/2015 To 12/31/2016
12. Name and address of the curatorial facility in which collections, records, data, photographs, and other documents resulting from activities conducted under this permit shall be deposited for permanent preservation on behalf of the United States Government. Idaho Panhandle National Forests Attn: Shawn Gibson 3815 Schreiber Way Coeur d Alene, ID 83815

TERMS AND CONDITIONS

I. GENERAL TERMS

A. AUTHORITY. This permit is issued pursuant to , 36 CFR Part 251, Subpart B, 36 CFR Part 296, the Uniform Rules and Regulations of the Antiquities Act of 1906, 43 CFR Part 3, and applicable Forest Service policies and procedures and is subject to their provisions.

B. AUTHORIZED OFFICER. The authorized officer for this permit is the Forest Supervisor or a subordinate officer with delegated authority.

C. ANNUAL REVIEW. If this permit is issued for more than one year, it shall be reviewed annually by the authorized officer.

D. RENEWAL AND EXTENSION. This permit is not renewable. The holder may request an extension of this permit for a limited, specified period to complete activities authorized under this permit. Requests for an extension must be submitted in writing at least one month before expiration of this permit.

E. AMENDMENT. This permit may be amended in whole or in part by the Forest Service when, at the discretion of the authorized officer, such action is deemed necessary or desirable to incorporate new terms that may be required by law, regulation, the applicable land management plan, or projects and activities implementing a land management plan pursuant to 36 CFR Part 215. Any amendments to individuals named in or activities authorized by this permit that are needed by the holder must be approved by the authorized officer in writing.

F. COMPLIANCE WITH LAWS, REGULATIONS, AND OTHER LEGAL REQUIREMENTS. In exercising the privileges granted by this permit, the holder shall comply with all present and future federal laws and regulations and all present and future state, county, and municipal laws, regulations, and other legal requirements that apply to the permit area, to the extent they do not conflict with federal law, regulations, or policy. The Forest Service assumes no responsibility for enforcing laws, regulations, and other legal requirements that fall under the jurisdiction of other

governmental entities.

G. NON-EXCLUSIVE USE. The use and occupancy authorized by this permit are not exclusive. The Forest Service reserves the right of access to the permit area, including a continuing right of physical entry to the permit area for inspection, monitoring, or any other purpose consistent with any right or obligation of the United States under any law or regulation. The holder shall allow the authorized officer or the authorized officer's representative full access to the permit area at any time the holder is in the field for purposes of examining the permit area and any recovered materials and related records. The Forest Service reserves the right to allow others to use the permit area in any way that is not inconsistent with the holder's rights and privileges under this permit, after consultation with all parties involved.

H. ASSIGNABILITY. This permit is not assignable or transferable.

II. OPERATIONS

A. OPERATING PLAN. The application corresponding to this permit is incorporated as the operating plan for this permit and is attached as Appendix A. The authorized officer may supplement the information contained in the application as appropriate or necessary.

B. REQUIRED PERMITS. The holder shall obtain all other permits required for conducting the activities authorized by this permit.

C. QUALIFIED INDIVIDUALS. Archaeological project design, literature review, development of regional historical contexts, site evaluation, conservation and protection measures, and recommendations for subsequent investigations shall be developed with direct involvement of an individual who meets the Secretary of the Interior's Standards for Archaeology and Historic Preservation. Fieldwork shall be overseen by an individual who meets the Secretary of the Interior's Standards for Archaeology and Historic Preservation.

D. CONDITION OF OPERATIONS. The holder shall maintain the authorized improvements and permit area to standards of repair, orderliness, neatness, sanitation, and safety acceptable to the authorized officer and consistent with other provisions of this permit. Standards are subject to periodic change by the authorized officer.

E. PROHIBITION ON USE OF MECHANIZED EQUIPMENT IN WILDERNESS AREAS. The holder shall not use mechanized equipment in wilderness areas and shall not use mechanized equipment in proposed or potential wilderness areas without prior written approval from the authorized officer.

F. PROHIBITION ON FLINT KNAPPING AND LITHIC REPLICATION EXPERIMENTS. The holder shall not conduct any flint knapping or lithic replication experiments at any archaeological site, aboriginal quarry source, or non-archaeological site that might be mistaken for an archaeological site as a result of such experiments.

G. PROHIBITION ON IMPEDING OR INTERFERING WITH OTHER USES. The holder shall perform the activities authorized by this permit so as not to impede or interfere with administrative or other authorized uses of National Forest System lands.

H. RESTRICTION ON MOTOR VEHICLE USE. The holder shall restrict motor vehicle use to designated roads, trails, and areas, unless specifically provided otherwise in the operating plan.

I. MINIMIZING GROUND DISTURBANCE. The holder shall keep ground disturbance to a minimum consistent with the nature and purpose of the authorized fieldwork.

J. RESOURCE PROTECTION. The holder shall conduct all activities so as to prevent or minimize scarring, erosion, littering, and pollution of National Forest System lands, water pollution, and damage to watersheds. In addition, the holder shall take precautions at all times to prevent wildfire. The holder may not burn debris without prior written approval from the authorized officer.

K. PREVENTION OF INJURY. The holder shall take precautions to protect livestock, wildlife, the public, and other users of National Forest System lands from accidental injury at any excavation site.

L. DESTRUCTION AND REMOVAL OF TREES. The holder shall not destroy or remove any trees on National Forest System lands without prior written approval from the authorized officer.

M. RESOURCE MANAGEMENT FACILITIES. The holder shall not disturb resource management facilities, such as

fences, reservoirs, and other improvements, within the permit area without prior written approval from the authorized officer. Where disturbance of a resource management facility is necessary, the holder shall return it to its prior location and condition.

N. BACKFILLING. The holder shall backfill all subsurface test and excavation sites as soon as possible after recording the results and shall restore subsurface test and excavation sites as closely as possible to their original contour.

O. REMOVAL OF STAKES AND FLAGGING. The holder shall remove temporary stakes and flagging installed by the holder upon completion of fieldwork.

P. SITE RESTORATION. The holder shall restore all camp and work areas to their original condition before vacating the permit area. Refuse shall be carried out and deposited in disposal areas approved by the authorized officer.

Q. TITLE TO ARTIFACTS AND ASSOCIATED DOCUMENTATION. Archaeological and historical artifacts excavated or removed from National Forest System lands and any associated documentation shall remain the property of the United States.

R. NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION (NAGPRA). In accordance with 25 U.S.C. 3002 (d) and 43 CFR 10.4, if the holder inadvertently discovers human remains, funerary objects, sacred objects, or objects of cultural patrimony on National Forest System lands, the holder shall immediately cease work in the area of the discovery and shall make a reasonable effort to protect and secure the items. The holder shall immediately notify the authorized officer by telephone of the discovery and shall follow up with written confirmation of the discovery. The activity that resulted in the inadvertent discovery may not resume until 30 days after the authorized officer certifies receipt of the written confirmation, if resumption of the activity is otherwise lawful, or at any time if a binding written agreement has been executed between the Forest Service and the affiliated Indian tribes that adopts a recovery plan for the human remains and objects.

S. ADDITIONAL REQUIREMENTS. Prior to beginning any fieldwork under the authority of this permit, the holder shall contact the authorized officer responsible for administering the lands involved to obtain further instructions regarding current land and resource conditions.

III. REPORTING REQUIREMENTS

A. PRELIMINARY REPORT. The holder shall submit a preliminary report to the authorized officer within 90 days of completion of the first stage of fieldwork. The preliminary report shall enumerate what was done during the first stage of fieldwork, how it was done, by whom, where, and with what results, including maps, global positioning satellite data, an approved site form for each newly recorded archaeological site, and the holder's professional recommendations regarding resource significance, as appropriate. Depending on the scope, duration, and nature of the work, the authorized officer may require progress reports periodically for the duration of the authorized activities.

B. DRAFT FINAL REPORT. Within 90 days of completion of fieldwork, the holder shall submit an edited draft final report to the authorized officer for review to ensure conformance with applicable laws, regulations, policies, and procedures and the terms and conditions of this permit.

C. FINAL REPORT. The holder shall submit the original final report and at least two copies to the authorized officer within 180 days after completion of fieldwork.

D. BLANKET SURVEY CONSULTING PERMIT. If this is a multi-year survey consulting permit, at the end of each calendar year, the holder shall submit to the authorized officer a report enumerating all activities conducted under this permit.

E. DEPOSIT OF MATERIALS AND DOCUMENTS WITH A CURATORIAL FACILITY. Within 90 days of the date the final report is submitted to the authorized officer, the holder shall deposit all artifacts, samples, and collections and original or clear copies of all records, data, photographs, and other documents resulting from activities authorized by this permit with the curatorial facility named in block 12.

F. CATALOGUE AND EVALUATION OF DEPOSITED MATERIALS. The holder shall provide the authorized officer with a catalogue and evaluation of all materials deposited with the curatorial facility named in block 12, including the facility's accession or catalogue numbers, and confirmation, signed by an authorized curatorial facility official, that artifacts, samples, and collections were deposited with the approved curatorial facility. The confirmation

shall include the date the materials were deposited and the type, number, and condition of the deposited materials.

G. CONFIDENTIALITY OF SENSITIVE RESOURCES. The holder agrees to keep the specific location of sensitive resources confidential. Sensitive resources include but are not limited to threatened, endangered, and rare species; archaeological sites; caves; fossil sites; minerals; commercially valuable resources; and traditional cultural properties.

H. CONFIDENTIALITY OF INFORMATION IDENTIFYING ARCHAEOLOGICAL SITES. Without the authorized officer's prior written approval, the holder shall not publish any locational or other information identifying archaeological sites that could compromise their protection and management by the federal government.

I. IDENTIFICATION OF FOREST SERVICE PERMIT. Any published article, paper, or book containing results of work conducted under this permit shall specify that the work was performed in the Idaho Panhandle National Forest under a Forest Service permit.

J. SUBMISSION OF WRITTEN MATERIALS. The holder shall submit a copy of any published or unpublished report, article, paper, or book resulting from the authorized activities (other than reports required by clauses III.A, B, and C) to the authorized officer and the appropriate official of the curatorial facility named in block 12. The holder shall submit tabular and spatial data to the authorized officer in the format specified in Appendix A.

IV. RIGHTS AND LIABILITIES

A. LEGAL EFFECT OF THE PERMIT. This permit, which is revocable and terminable, is not a contract or a lease, but rather a federal license. The benefits and requirements conferred by this authorization are reviewable solely under the procedures set forth in 36 CFR Part 251, Subpart C, and 5 U.S.C. 704. This permit does not constitute a contract for purposes of the Contract Disputes Act, 41 U.S.C. 601. The permit is not real property, does not convey any interest in real property, and may not be used as collateral for a loan.

B. VALID OUTSTANDING RIGHTS. This permit is subject to all valid outstanding rights. Valid outstanding rights include those derived from mining and mineral leasing laws of the United States. The United States is not liable to the holder for the exercise of any such right.

C. ABSENCE OF THIRD-PARTY BENEFICIARY RIGHTS. The signatories of this permit do not intend to confer any rights on any third party as a beneficiary under this permit.

D. DAMAGE TO UNITED STATES PROPERTY. The holder has an affirmative duty to protect from damage the land, property, and other interests of the United States. Damage includes but is not limited to fire suppression costs, and all costs and damages associated with or resulting from the release or threatened release of a hazardous material occurring during or as a result of activities of the holder or the holder's heirs, assigns, agents, employees, contractors, or lessees on, or related to, the lands, property, and other interests covered by this permit. For purposes of clause IV.F, "hazardous material" shall mean any hazardous substance, pollutant, contaminant, hazardous waste, oil, and/or petroleum product, as those terms are defined under any federal, state, or local laws or regulations.

E. INDEMNIFICATION. The holder shall indemnify, defend, and hold harmless the United States for any costs, damages, claims, liabilities, and judgments arising from past, present, and future acts or omissions of the holder in connection with the use and occupancy authorized by this permit. This indemnification and hold harmless provision includes but is not limited to acts and omissions of the holder or the holder's family, guests, invitees, heirs, assignees, agents, employees, contractors, or lessees in connection with the use and occupancy authorized by this permit which result in (1) violations of any laws and regulations which are now or which may become applicable; (2) judgments, claims, demands, penalties, or fees assessed against the United States; (3) costs, expenses, and damages incurred by the United States; or (4) the release or threatened release of any solid waste, hazardous waste, hazardous materials, pollutant, contaminant, oil in any form, or petroleum product into the environment. The authorized officer may prescribe terms that allow the holder to replace, repair, restore, or otherwise undertake necessary curative actions to mitigate damages in addition to or as an alternative to monetary indemnification.

F. CONTINUATION OF LIABLITY BEYOND EXPIRATION. The holder shall not be released from requirements of this permit until all outstanding obligations have been satisfied, regardless of whether the permit has expired.

V. PERMIT FEES

A. LAND USE FEE. The holder shall pay an annual land use fee of $72.00 for the period from 01/01/2015 to 12/31/2015 and thereafter annually on 01/01, in the amount of $72.00.

B. MODIFICATION OF THE LAND USE FEE. The land use fee may be revised whenever necessary to reflect the market value of the authorized use or when the fee system used to calculate the land use fee is modified or replaced.

C. TERMINATION FOR NONPAYMENT. This permit shall terminate without the necessity of prior notice and opportunity to comply when any permit fee payment is 90 calendar days from the due date in arrears. The holder shall be responsible for the delinquent fees, as well as any other costs of restoring the site to its original condition, including hazardous waste cleanup.

VI. REVOCATION, SUSPENSION, AND TERMINATION

A. REVOCATION AND SUSPENSION. The authorized officer may revoke or suspend this permit in whole or in part:

1. For noncompliance with federal, state or local law.
2. For noncompliance with the terms and conditions of this permit.
3. For abandonment or other failure of the holder to exercise the privileges granted.
4. With the consent of the holder.
5. For specific and compelling reasons in the public interest.

Prior to revocation or suspension, other than immediate suspension under clause C, the authorized officer shall give the holder written notice of the grounds for revocation or suspension. In the case of revocation or suspension based on clause VI.A.1, 2, or 3, the authorized officer shall give the holder a reasonable period, not to exceed 90 days, to cure any noncompliance.

B. RELINQUISHMENT OF ARTIFACTS AND DOCUMENTS. Within 30 days of revocation or suspension of this permit, the holder shall deliver to the Forest Service all artifacts and originals of all photographs, negatives, catalogues, field notes, analysis sheets, reports in any stage of preparation, computer files, and any other records resulting from any activity conducted under this permit.

C. IMMEDIATE SUSPENSION. The authorized officer may immediately suspend this permit in whole or in part when necessary to protect public health or safety or the environment. The suspension decision shall be in writing. The holder may request an on-site review with the authorized officer's supervisor of the adverse conditions prompting the suspension. The authorized officer's supervisor shall grant this request within 48 hours. Following the on-site review, the authorized officer's supervisor shall promptly affirm, modify, or cancel the suspension.

D. APPEALS AND REMEDIES. Written decisions made by the authorized officer relating to administration of this permit are subject to appeal pursuant to 36 CFR Part 214. Revocation or suspension of this permit shall not give rise to any claim for damages by the holder against the Forest Service.

E. TERMINATION. This permit shall terminate when by its terms a fixed or agreed upon condition, event, or time occurs without any action by the authorized officer. Examples include but are not limited to expiration of the permit by its terms on a specified date. Termination of this permit is not subject to administrative appeal and shall not give rise to any claim for damages by the holder against the Forest Service.

VII. MISCELLANEOUS PROVISIONS

A. MEMBERS OF CONGRESS. No member of or delegate to Congress or Resident Commissioner shall benefit from this permit either directly or indirectly, except to the extent the authorized use provides a general benefit to a corporation.

B. SUPERIOR CLAUSES. If there is any conflict between any of the preceding clauses and any subsequent clauses or appendices, the preceding clauses shall control.

C. Forest Service Representative (R1-X16). The District Ranger, Coeur d Alene River Ranger District, Telephone No. 208-664-2318, is responsible for administering this special-use authorization. The holder should contact the

District Ranger regarding any questions concerning the occupancy and use authorized and the provisions of this authorization.

D. Information From Holders (R1-X17). As a condition of this authorization, the holder is responsible for providing the authorized officer with any information in possession necessary for determining annual rental fees, ownership, or other matters concerning the administration of the authorized use by the Forest Service.

Regarding the submission of such information, the holder understands that it is a crime for any person to knowingly and willfully make false, fictitious, or fraudulent statements to matters under the jurisdiction of the United States Government (Title 18, U.S.C. Section 1001).

THIS PERMIT IS ACCEPTED SUBJECT TO ALL ITS TERMS AND CONDITIONS.

BEFORE ANY PERMIT IS ISSUED TO AN ENTITY, DOCUMENTATION MUST BE PROVIDED TO THE AUTHORIZED OFFICER OF THE AUTHORITY OF THE SIGNATORY FOR THE ENTITY TO BIND IT TO THE TERMS AND CONDITIONS OF THE PERMIT.

ACCEPTED:		
SWCA Environmental Consultants LORELEA HUDSON	Lorelea Hudson	4/27/2015
HOLDER NAME, PRECEDED BY NAME AND TITLE OF PERSON SIGNING ON BEHALF OF HOLDER, IF HOLDER IS AN ENTITY	SIGNATURE Cultural Resources Team Lead	DATE
APPROVED:		
CHAD HUDSON	District Ranger	
NAME AND TITLE OF AUTHORIZED OFFICER	SIGNATURE	DATE 05/04/2015

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond, to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0082. The time required to complete this information collection is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and, where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call toll free (866) 632-9992 (voice). TDD users can contact USDA through local relay or the Federal relay at (800) 877-8339 (TDD) or (866) 377-8642 (relay voice). USDA is an equal opportunity provider and employer.

The Privacy Act of 1974 (5 U.S.C. 552a) and the Freedom of Information Act (5 U.S.C. 552) govern the confidentiality to be provided for information received by the Forest Service.

Attachment B–E

Redacted from public version.